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SMD INDUCTIVE COMPONENTS for AUTOMOTIVE



ABC-ATEC Electronics Group
ABC Taiwan Electronics Corp.

SMD INDUCTIVE COMPONENTS for AUTOMOTIVE

ABC TAIWAN ELECTRONICS CORP

2023

COMPANY HISTORY



ABC TAIWAN ELECTRONICS CORP. is one of the leading manufacturers for quality inductors and transformers. We specialize in design and manufacturing electromagnetic components for various industries — Telecommunication, Industry Controls, Automotive products, and, Consumer etc.

In 1979, forty-three years ago, ABC was established in YANGMEI district. People here are diligent and hardworking. We gathered a competent and dedicated team applying the latest technology to cater design-in parts, deliver high level of services, and provide good quality products for our customers.

Our innovative product development allows us to offer fast service, excellent quality parts and competitive price to match our customers' needs. ABC's ultimate goal is to achieve total customer satisfaction through continuous improvement and development.

ARBUTUS (YANGMEI), in Chinese) a beautiful, luxuriant and whole year green tree, two hundreds years ago, immigrants arrived here, they found all the field in this valley were **ARBUTUS (YANGMEI)**, so, they called this town—**YANGMEI**.

1979

- **ABC TAIWAN ELECTRONICS CORP.** was founded in Hsiotsai Rd., Yangmei, Taiwan capital
- NT\$ 5,800,000(US\$145,000) and 5 employees Started producing choke coil in Sep.

1980

- Moved to Kuanghwa St., Yangmei, and 15 employees.
- Land acquisition of No.422, Sec.1 Yangfu Rd..

1981

- Started factory building construction.
- Acquired the second prize of good supplier from CANON.

1982

- Factory building completed and Axial Lead Choke Coils conformal coating auto processing line initialed.
- Capital increase to NT\$6,115,000(US\$ 152,875) and forty-seven employee.

1984

- EMI Filter and DC-DC Converter entered U.S.A., Singapore & UK Market.
- Started the R/D for EMI Filters and DC-DC CONVERTERS entered U.S.A., Singapore & UK Market.

1990

- New design CM series Wound Chip Inductor R&D completed and started production.

COMPANY HISTORY

1991

- CM chip inductor series was awarded 4 years tax exemption from Taiwan government.
- CM chip inductor series patent certificated in Germany #G9108527.6 and Taiwan #66599.

1995

- China Factory - ABC ELECTRONICS (PANYU) CORP. Started production (March 29, 1995).

2000

- ABC Electronics (Panyu) CORP. 2nd factory grand opened.
- Started Taiwan HQ building expansion.
- Starting Stock Initial Public Offer (IPO) processed.
- Overall Employee beneficial share system started.
- Acquired the Good Supplier Award from Garmin.

2001

- Acquired the 10th National Award of Small and Medium Enterprises.

2004

- MPC for High Frequency Capacitor patent certificated in Taiwan #188853 & #210097.
- Ceramic Heat Sink with Micro-pores Structure patent in Taiwan #189036, #213446 & #220351.
- Ceramic Heat Sink with Micro-pores Structure patent in Germany #20314728.6, Japan #3100267 & USA #US6705393B1.
- ABC Electronics (Shanghai) Factory. started production.
- Became a public trade company, Stock Listed in Taiwan Gretai (OTC) Securities Market.

2006

- Automotive Quality System TS 16949 Certificated.

2007

- Hazardous Substance Process Management IECQ QC 080000 Certificated.

2008

- Micromesh (Micro-pores) Material Producing Method Patent certificated in China #ZL 02 1 49137.2 (Aug. 6, 2008).
- Set up Precision Metal Parts Div., Factory located in Pingjhen Industrial Park. (Jan. 1, 2008).
- Opto-elec & Mechanic Components Div. launched 5 new models LED Shaped Lamps, and Stared OEM/ODM business. (Apr.).
- MES(Manufacturing Executive System) introduced into Shanghai factory (Nov.).

2009

- Started high current inductor, HP series production.
- Battery Cap improvement awarded 2 patents in Taiwan.

COMPANY HISTORY

2010

- MPC Heatsink was designed in the Samsung 2.8 cm Super Slim LED TV, launched in Q1.

2012

- Officially took over AOBA Technology as a subsidiary (2012.04.01).

2013

- Customer Approval for contract manufacturer with integrated mass production and quality control.

2014

- MCU product entered automotive market.
- For Ethernet application, Common Mode Choke patent acquired in Taiwan and China, and started production.

2015

- ASF products massed production.
- DP product line set up and promoted to market.
- Common Mode Filter and Core patents acquired in Germany.

2016

- ABC Shanghai and Malaysia factory - AOBA Technology, TS 16949 Certificated.

2017

- ABC Taiwan IATF 16949 Certificated.

2018

- Yangmei II Factory Started Production (2018.04.01).
- IECQ QC 080000 : 2017 Certificated.

2019

- ISO 14001 Environmental Management System Re-certificated
- Yangmei II Factory started Ethernet EMI Common Mode Filters and Monolithic Power Inductors Lines Set up & Trial Run (2019.12.05).

2020

- Common mode line filter AQF series launched for EMI noise suppression and automotive standard qualification.
- E-field Shielded High Current Power Inductor HS series lanuched.

2021

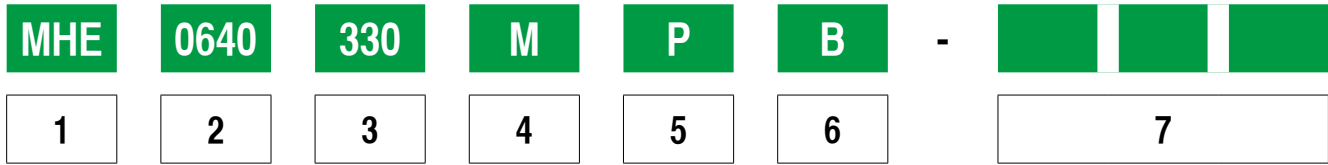
- Joined the Mobility In Harmony (MIH) platform alliance and became Open EV Alliance member (2021.03.30).

Figure	Profile	Type	Dimension (LxWxH mm)	Inductance	Rated Current	AEC-Q200 Grade	Page
Wire Wound Chip Inductor							
	RF Ceramic	SWI0402CT-A1	1.0 x 0.6 x 0.5	1.0 ~ 120 nH	1.4 A ~ 110 mA	Grade 1	1
		SWI0603CS-A1	1.7 x 1.2 x 0.9	1.6 ~ 390 nH	700 mA ~ 130 mA		1
Wound Chip Inductor							
	High Current	ACC3225	3.2 x 2.5 x 2.2	0.1 ~ 100 μH	2.8 A ~ 150 mA	Grade 1	5
		ACC4532	4.5 x 3.2 x 3.2	1.0 ~ 1,000 μH	2.3 A ~ 80 mA		5
Shielded SMD Power Inductor							
	Molded - High current	MHE0630-T	7.1 x 6.6 x 3.0	0.33 ~ 33 μH	21 A ~ 2.5 A	Grade 0	8
		MHE0640-T	7.1 x 6.6 x 4.0	1.0 ~ 68 μH	12 A ~ 1.5 A		8
		MHE1040-T	12 x 10 x 4.0	2.2 ~ 100 μH	15 A ~ 2.0 A		8
	Molded - High Saturation	MHE0630-Q	7.1 x 6.6 x 3.0	0.1 ~ 10 μH	34 A ~ 4.0 A	Grade 0	11
		MHE1040-Q	12 x 10 x 4.0	0.7 ~ 47 μH	23 A ~ 3.5 A		11
	Metal Cover Molded	MHS0735-S	7.2 x 7.2 x 3.5	0.33 ~ 33 μH	21 A ~ 2.5 A	Grade 0	14
		MHS1145-S	12 x 10.7 x 4.5	2.2 ~ 100 μH	15 A ~ 2.0 A		14
	Metal Cover Molded - High Saturation	MHS0735-E	7.2 x 7.2 x 3.5	0.1 ~ 10 μH	34 A ~ 4.0 A	Grade 0	17
		MHS1145-E	12 x 10.7 x 4.5	1.0 ~ 68 μH	18 A ~ 3.0 A		17
	Semi-shielded	MSN3030	3.0 x 3.0 x 3.0	1.0 ~ 100 μH	2.6 A ~ 250 mA	Grade 0	20
		MSN4030	4.0 x 4.0 x 3.0	1.0 ~ 100 μH	5.5 A ~ 550 mA		20
		MSN5030	5.0 x 5.0 x 3.0	0.47 ~ 100 μH	7.0 A ~ 450 mA		20
		MSN5040	5.0 x 5.0 x 4.0	1.5 ~ 47 μH	5.2 A ~ 1.1 A		20
		MSN6045	6.0 x 6.0 x 4.7	0.55 ~ 100 μH	7.0 A ~ 720 mA		20
		TPI4018CT-A1	4.0 x 4.0 x 1.9	0.82 ~ 220 μH	4.0 A ~ 280 mA		Grade 1
		TPI6045CT-A1	6.0 x 6.0 x 4.5	1.0 ~ 330 μH	6.5 A ~ 400 mA	27	
		MRN8040	8.2 x 7.9 x 4.2	0.5 ~ 100 μH	10 A ~ 1.0 A	Grade 0	30
SMD Power Inductor							
	Non-Shielded	AER0403	∅4.5 x 4.0 x 3.2	1.0 ~ 68 μH	2.7 A ~ 400 mA	Grade 1	32
		AER0604	∅5.8 x 5.2 x 4.5	1.2 ~ 220 μH	5.3 A ~ 470 mA		32
		AER0805	∅7.8 x 7.0 x 5.0	1.5 ~ 470 μH	5.8 A ~ 400 mA		32
		MER1006	∅10 x 9.0 x 5.4	1.8 ~ 820 μH	7.2 A ~ 450 mA	Grade 0	32
		ASR1011	∅9.5 x ∅9.5 x 12	10 ~ 1,000 μH	3.5 A ~ 300 mA	Grade 1	39
		ASB7030	7.0 x 7.0 x 3.0	1.0 ~ 680 μH	3.0 A ~ 180 mA		41
		ASB7045	7.0 x 7.0 x 4.5	1.2 ~ 1,000 μH	3.8 A ~ 200 mA		41
		ASB1305	13 x 13 x 4.8	2.5 ~ 1,000 μH	7.2 A ~ 460 mA		41
		ASB1806	14 x 18 x 6.6	1.0 ~ 1,000 μH	10 A ~ 500 mA		45
		ASB2207	22 x 15 x 7.0	0.8 ~ 100 μH	16 A ~ 2.0 A		47

Figure	Profile	Type	Dimension (LxWxH mm)	Inductance	Rated Current	AEC-Q200 Grade	Page	
Shielded SMD Power Inductor								
		AQS3818	3.8 x 3.8 x 1.8	1.0 ~ 220 μ H	2.1 A ~ 160 mA	Grade 1	49	
		AQS4818	4.8 x 4.8 x 1.8	1.0 ~ 47 μ H	3.6 A ~ 470 mA	Grade 0	49	
		AQS4828	4.8 x 4.8 x 2.8	1.2 ~ 220 μ H	3.0 A ~ 240 mA		49	
		AQS5818	5.8 x 5.8 x 1.8	1.5 ~ 220 μ H	3.0 A ~ 240 mA		49	
		AQS5828	5.8 x 5.8 x 2.8	2.6 ~ 1,000 μ H	2.2 A ~ 130 mA		49	
		AQS6822	6.8 x 6.8 x 2.3	1.0 ~ 1,000 μ H	4.2 A ~ 130 mA	Grade 1	49	
		MQS3228	3.3 x 3.3 x 2.8	10 ~ 100 μ H	800 mA ~ 240 mA		57	
		MQS5228	5.2 x 5.2 x 2.8	1.2 ~ 1,000 μ H	3.9 A ~ 150 mA		57	
		MQS6828	6.8 x 6.8 x 2.8	2.5 ~ 1,000 μ H	3.4 A ~ 170 mA		57	
		MBS0703	7.3 x 7.3 x 3.5	10 ~ 1,000 μ H	1.9 A ~ 170 mA	Grade 0	61	
		MBS0704	7.3 x 7.3 x 4.5	10 ~ 1,000 μ H	2.1 A ~ 200 mA		61	
	Standard	ASU3028	3.3 x 3.5 x 2.8	10 ~ 47 μ H	720 mA ~ 320 mA		65	
		ASU5028	5.2 x 5.2 x 2.8	1.2 ~ 100 μ H	3.4 A ~ 420 mA		67	
		ASU6025	6.2 x 6.5 x 2.5	1.2 ~ 220 μ H	3.2 A ~ 240 mA		67	
		ASU8028	8.0 x 8.0 x 2.8	2.5 ~ 100 μ H	4.2 A ~ 700 mA		67	
		ASU8030	8.0 x 8.0 x 2.8	3.3 ~ 100 μ H	4.6 A ~ 750 mA		67	
		ASU8040	8.0 x 8.0 x 3.8	3.3 ~ 150 μ H	5.0 A ~ 770 mA		67	
		ASU8045	8.0 x 8.0 x 4.5	3.5 ~ 100 μ H	5.0 A ~ 920 mA		67	
		ASU8058	8.0 x 8.0 x 5.8	3.9 ~ 100 μ H	4.5 A ~ 900 mA		Grade 1	67
		ASU1028	10 x 10 x 2.8	1.0 ~ 150 μ H	7.0 A ~ 650 mA		67	
		ASU1030	10 x 10 x 2.8	3.5 ~ 150 μ H	5.0 A ~ 840 mA		67	
		ASU1038	10 x 10 x 3.8	1.5 ~ 330 μ H	7.0 A ~ 520 mA		67	
		ASU1040	10 x 10 x 3.8	3.8 ~ 330 μ H	5.8 A ~ 600 mA		67	
		ASU1048	10 x 10 x 4.8	1.5 ~ 330 μ H	7.0 A ~ 520 mA		67	
		ASU1050	10 x 10 x 4.8	4.7 ~ 1,000 μ H	5.1 A ~ 400 mA		67	
ASU1065	10 x 10 x 6.6	2.8 ~ 100 μ H	6.5 A ~ 1.4 A	67				

Figure	Profile	Type	Dimension (LxWxH mm)	Inductance /Impedance	Rated Current	AEC-Q200 Grade	Page
Shielded SMD Power Inductor							
	High Inductance	ASS7032	7.0 x 7.0 x 3.2	2.2 ~ 1,000 μ H	2.6 A ~ 140 mA	Grade 1	81
		ASS1005	10 x 13 x 4.9	1.0 ~ 3,300 μ H	4.5 A ~ 100 mA		83
		ASS1210	12 x 12 x 10	1.0 ~ 1,000 μ H	11 A ~ 700 mA		87
		ASS1240	13 x 13 x 4.0	10 ~ 1,000 μ H	4.0 A ~ 400 mA		90
		ASS1260	13 x 13 x 6.0	1.0 ~ 1,000 μ H	9.4 A ~ 600 mA		90
		MSS1280	13 x 13 x 7.5	2.4 ~ 1,200 μ H	9.2 A ~ 550 mA		90
		ASS1806	14 x 18 x 6.8	10 ~ 1,000 μ H	4.0 A ~ 450 mA		95
	High Performance	ACU1048	10.0 x 10.2 x 4.8	0.68 ~ 470 μ H	9.5 A ~ 600 mA	Grade 0	97
		MCU1227	12.5 x 12.8 x 7.7	22 ~ 470 μ H	5.5 A ~ 1.1 mA		101
	Coupled	MBF0703	7.6 x 7.6 x 3.4	8.2 ~ 1000 μ H	2.19 A ~ 260 mA	Grade 1	103
		MSF1258	12.5 x 12.5 x 6.0	0.47 ~ 1,000 μ H	14.6 A ~ 570 mA		105
		MSF1278	12.5 x 12.5 x 8.0	0.47 ~ 1,000 μ H	14.6 A ~ 610 mA		105
SMD Line Filter							
	Data Line	MSF3225	3.2 x 2.5 x 2.5	100 ~ 100 μ H	100 mA ~ 100 mA	Grade 1	109
		ASF4532-E	4.5 x 3.2 x 3.0	200 ~ 200 μ H	110 mA ~ 110 mA		111
		ASF4532-C	4.5 x 3.2 x 3.0	11 ~ 100 μ H	360 mA ~ 200 mA		Grade 0
		MSF9050	9.2 x 6.0 x 5.0	10 ~ 6,500 μ H	1.6 A ~ 300 mA	Grade 2	115
	Power Line	AQF7035	7.0 x 6.0 x 3.5	225 ~ 1,800 Ω	5.0 A ~ 1.2 A	Grade 1	117
		AQF9045	9.0 x 7.0 x 4.5	500 ~ 500 Ω	5.0 A ~ 5.0 A		117
		AQF1260	12 x 11 x 6.0	500 ~ 750 Ω	8.0 A ~ 6.0 A		117

Part Number Expression



1	Product Type		
2	Dimension		
3	Value	Code	Define
		1N2	1.2 nH
		14N	14 nH
		R14	0.14 μ H / 140 nH
		2R2	2.2 μ H
		100	10 μ H / 10 Ω
		201	200 μ H / 200 Ω
		210	210 μ H / 210 Ω
		102	1,000 μ H / 1,000 Ω

4	Tolerance	Code	Define
		B	\pm 0.1nH
		C	\pm 0.2nH
		D	\pm 0.3nH
		G	\pm 2%
		H	\pm 3%
		J	\pm 5%
		K	\pm 10%
		M	\pm 20%
Y	Others		
5	Classification		
6	Packing code		
7	Reference code		

Part Number Expression for SWI, PWC, LPI, HCI, TPI Types



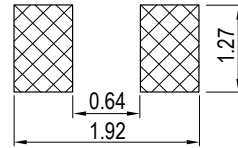
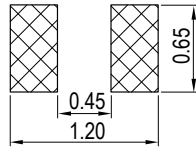
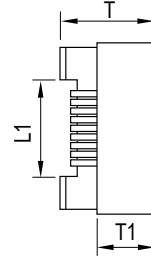
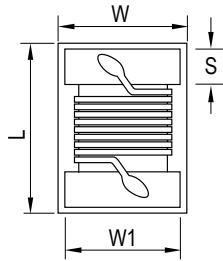
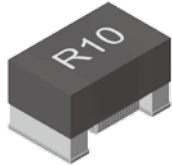
1	Product Type		
2	Dimension		
3	Material Type	Code	Define
		C	Ceramic
		F	Ferrite
		P	Ferrite with Magnetic Shield
		S	Shielded
		H	Non-Shielded
4	T or S for taping		
3+4	Material Type	Code	Define
		HP	High Current
		HQ	High Q

5	Value	Code	Define
		1N2	1.2 nH
		14N	14 nH
		R14	0.14 μ H / 140 nH
		2R2	2.2 μ H
6	Tolerance	Code	Define
		B	\pm 0.20 nH
		S	\pm 0.30 nH for SWI \pm 25% for PWC
		G	\pm 2%
		J	\pm 5%
		K	\pm 10%
		M	\pm 20%
N	\pm 30%		
7	Automotive		

SWI
SERIES

0402CT / 0603CS-A1

RF Ceramic



SWI0402CT-A1

SWI0603CS-A1

(PCB Pattern)

Unit: mm

Series	L	W	T	S	L1	W1	T1
SWI0402CT-A1	1.00±0.10	0.55±0.10	0.50±0.10	0.20±0.10	0.60 ref.	0.48 ref.	0.25 ref.
SWI0603CS-A1	1.65±0.20	1.15±0.20	0.90±0.20	0.30±0.10	0.92 ref.	0.76 ref.	0.50 ref.

Features

- Wide range of inductance
- High Q
- High SRF
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- PEPS



SWI0402 CT Series

Part No.	Inductance ¹ (nH) KEY	Tolerance	Q ² min.	SRF ³ (GHz) min.	RDC ⁴ (Ω) max.	IDC ⁵ (mA) max.
SWI0402CT 1N0 □-A1	1.0 @ 250MHz	B, S	13 @ 250MHz	6000	0.045	1360
SWI0402CT 1N5 □-A1	1.5 @ 250MHz	B, S	16 @ 250MHz	6000	0.070	1040
SWI0402CT 1N9 □-A1	1.9 @ 250MHz	B, S	16 @ 250MHz	6000	0.070	1040
SWI0402CT 2N0 □-A1	2.0 @ 250MHz	B, S	16 @ 250MHz	6000	0.070	1040
SWI0402CT 2N2 □-A1	2.2 @ 250MHz	B, S	18 @ 250MHz	6000	0.070	960
SWI0402CT 2N4 □-A1	2.4 @ 250MHz	B, S	16 @ 250MHz	6000	0.068	790
SWI0402CT 2N7 □-A1	2.7 @ 250MHz	B, S	16 @ 250MHz	6000	0.120	860
SWI0402CT 3N3 □-A1	3.3 @ 250MHz	B, J, K	20 @ 250MHz	6000	0.066	840
SWI0402CT 3N6 □-A1	3.6 @ 250MHz	B, J, K	20 @ 250MHz	6000	0.066	840
SWI0402CT 3N9 □-A1	3.9 @ 250MHz	B, J, K	20 @ 250MHz	5800	0.066	840
SWI0402CT 4N3 □-A1	4.3 @ 250MHz	B, J, K	18 @ 250MHz	6000	0.091	700
SWI0402CT 4N7 □-A1	4.7 @ 250MHz	B, J, K	15 @ 250MHz	4775	0.130	640
SWI0402CT 5N1 □-A1	5.1 @ 250MHz	B, J, K	23 @ 250MHz	5800	0.083	800
SWI0402CT 5N6 □-A1	5.6 @ 250MHz	B, J, K	23 @ 250MHz	5800	0.083	760
SWI0402CT 6N2 □-A1	6.2 @ 250MHz	B, J, K	23 @ 250MHz	5800	0.083	760
SWI0402CT 6N8 □-A1	6.8 @ 250MHz	B, J, K	20 @ 250MHz	4800	0.083	680
SWI0402CT 7N5 □-A1	7.5 @ 250MHz	B, J, K	25 @ 250MHz	5800	0.104	680
SWI0402CT 8N2 □-A1	8.2 @ 250MHz	B, J, K	25 @ 250MHz	4400	0.104	680
SWI0402CT 8N7 □-A1	8.7 @ 250MHz	B, J, K	18 @ 250MHz	4100	0.200	480
SWI0402CT 9N0 □-A1	9.0 @ 250MHz	B, J, K	25 @ 250MHz	4160	0.104	680
SWI0402CT 9N5 □-A1	9.5 @ 250MHz	B, J, K	18 @ 250MHz	4000	0.200	680
SWI0402CT 10N □-A1	10 @ 250MHz	G, J, K	23 @ 250MHz	3900	0.195	480
SWI0402CT 11N □-A1	11 @ 250MHz	G, J, K	26 @ 250MHz	3680	0.120	640
SWI0402CT 12N □-A1	12 @ 250MHz	G, J, K	26 @ 250MHz	3600	0.120	640
SWI0402CT 13N □-A1	13 @ 250MHz	G, J, K	24 @ 250MHz	3450	0.210	560
SWI0402CT 15N □-A1	15 @ 250MHz	G, J, K	26 @ 250MHz	3280	0.172	560
SWI0402CT 16N □-A1	16 @ 250MHz	G, J, K	24 @ 250MHz	3100	0.220	560
SWI0402CT 18N □-A1	18 @ 250MHz	G, J, K	25 @ 250MHz	3100	0.230	520
SWI0402CT 19N □-A1	19 @ 250MHz	G, J, K	26 @ 250MHz	3040	0.202	480
SWI0402CT 20N □-A1	20 @ 250MHz	G, J, K	25 @ 250MHz	3000	0.250	420
SWI0402CT 22N □-A1	22 @ 250MHz	G, J, K	25 @ 250MHz	2800	0.300	400
SWI0402CT 23N □-A1	23 @ 250MHz	G, J, K	26 @ 250MHz	2720	0.214	400
SWI0402CT 24N □-A1	24 @ 250MHz	G, J, K	25 @ 250MHz	2700	0.300	400
SWI0402CT 27N □-A1	27 @ 250MHz	G, J, K	26 @ 250MHz	2480	0.298	400
SWI0402CT 30N □-A1	30 @ 250MHz	G, J, K	25 @ 250MHz	2350	0.300	400
SWI0402CT 33N □-A1	33 @ 250MHz	G, J, K	24 @ 250MHz	2350	0.350	400
SWI0402CT 36N □-A1	36 @ 250MHz	G, J, K	26 @ 250MHz	2320	0.403	320
SWI0402CT 39N □-A1	39 @ 250MHz	G, J, K	25 @ 250MHz	2100	0.550	320
SWI0402CT 40N □-A1	40 @ 250MHz	G, J, K	26 @ 250MHz	2240	0.438	320
SWI0402CT 43N □-A1	43 @ 250MHz	G, J, K	25 @ 250MHz	2030	0.810	240
SWI0402CT 47N □-A1	47 @ 200MHz	G, J, K	26 @ 200MHz	2100	0.830	210
SWI0402CT 51N □-A1	51 @ 200MHz	J, K	25 @ 200MHz	1750	0.820	210
SWI0402CT 56N □-A1	56 @ 200MHz	J, K	22 @ 200MHz	1760	0.970	200
SWI0402CT 68N □-A1	68 @ 200MHz	J, K	22 @ 200MHz	1620	1.120	180
SWI0402CT 82N □-A1	82 @ 150MHz	J, K	20 @ 150MHz	1500	1.250	150
SWI0402CT 91N □-A1	91 @ 150MHz	J, K	20 @ 150MHz	1350	2.300	120
SWI0402CT R10 □-A1	100 @ 150MHz	J, K	20 @ 150MHz	1300	2.520	120
SWI0402CT R12 □-A1	120 @ 150MHz	J, K	20 @ 150MHz	1100	2.660	110

SWI0603 CS Series

Part No.	Inductance ¹ (nH) KEY	Tolerance	Q ² min.	SRF ³ (GHz) min.	RDC ⁴ (Ω) max.	IDC ⁵ (mA) max.
SWI0603CS 1N6 □-A1	1.6 @ 250MHz	B, S, K	18 @ 250MHz	12500	0.030	700
SWI0603CS 1N8 □-A1	1.8 @ 250MHz	B, S, K	16 @ 250MHz	>8500	0.045	700
SWI0603CS 2N2 □-A1	2.2 @ 250MHz	B, S, K	13 @ 250MHz	>8500	0.110	700
SWI0603CS 3N3 □-A1	3.3 @ 250MHz	J, K	35 @ 250MHz	6000	0.045	700
SWI0603CS 3N6 □-A1	3.6 @ 250MHz	J, K	22 @ 250MHz	6000	0.070	700
SWI0603CS 3N9 □-A1	3.9 @ 250MHz	J, K	22 @ 250MHz	6900	0.070	700
SWI0603CS 4N3 □-A1	4.3 @ 250MHz	J, K	22 @ 250MHz	5900	0.070	700
SWI0603CS 4N7 □-A1	4.7 @ 250MHz	J, K	20 @ 250MHz	5800	0.080	700
SWI0603CS 5N1 □-A1	5.1 @ 250MHz	J, K	18 @ 250MHz	5700	0.150	700
SWI0603CS 5N6 □-A1	5.6 @ 250MHz	J, K	16 @ 250MHz	5500	0.190	700
SWI0603CS 6N2 □-A1	6.2 @ 250MHz	J, K	25 @ 250MHz	5800	0.100	700
SWI0603CS 6N8 □-A1	6.8 @ 250MHz	G, J, K	27 @ 250MHz	5800	0.100	700
SWI0603CS 7N5 □-A1	7.5 @ 250MHz	G, J, K	28 @ 250MHz	4800	0.100	700
SWI0603CS 8N2 □-A1	8.2 @ 250MHz	G, J, K	28 @ 250MHz	4700	0.100	700
SWI0603CS 8N7 □-A1	8.7 @ 250MHz	G, J, K	28 @ 250MHz	4600	0.100	700
SWI0603CS 9N5 □-A1	9.5 @ 250MHz	G, J, K	28 @ 250MHz	5400	0.100	700
SWI0603CS 10N □-A1	10 @ 250MHz	G, J, K	31 @ 250MHz	4800	0.100	700
SWI0603CS 11N □-A1	11 @ 250MHz	G, J, K	30 @ 250MHz	4000	0.100	700
SWI0603CS 12N □-A1	12 @ 250MHz	G, J, K	32 @ 250MHz	4000	0.100	700
SWI0603CS 13N □-A1	13 @ 250MHz	G, J, K	38 @ 250MHz	3600	0.100	700
SWI0603CS 15N □-A1	15 @ 250MHz	G, J, K	35 @ 250MHz	4000	0.120	700
SWI0603CS 16N □-A1	16 @ 250MHz	G, J, K	35 @ 250MHz	3300	0.120	700
SWI0603CS 18N □-A1	18 @ 250MHz	G, J, K	35 @ 250MHz	3100	0.120	700
SWI0603CS 20N □-A1	20 @ 250MHz	G, J, K	35 @ 250MHz	3100	0.120	700
SWI0603CS 22N □-A1	22 @ 250MHz	G, J, K	35 @ 250MHz	3000	0.150	700
SWI0603CS 23N □-A1	23 @ 250MHz	G, J, K	38 @ 250MHz	2850	0.140	700
SWI0603CS 24N □-A1	24 @ 250MHz	G, J, K	35 @ 250MHz	2650	0.140	700
SWI0603CS 27N □-A1	27 @ 250MHz	G, J, K	35 @ 250MHz	2800	0.200	600
SWI0603CS 30N □-A1	30 @ 250MHz	G, J, K	37 @ 250MHz	2250	0.144	600
SWI0603CS 33N □-A1	33 @ 250MHz	G, J, K	36 @ 250MHz	2300	0.200	600
SWI0603CS 36N □-A1	36 @ 250MHz	G, J, K	36 @ 250MHz	2080	0.200	600
SWI0603CS 39N □-A1	39 @ 250MHz	G, J, K	36 @ 250MHz	2200	0.210	600
SWI0603CS 43N □-A1	43 @ 250MHz	G, J, K	38 @ 250MHz	2000	0.220	600
SWI0603CS 47N □-A1	47 @ 200MHz	G, J, K	35 @ 200MHz	2000	0.230	600
SWI0603CS 51N □-A1	51 @ 200MHz	G, J, K	32 @ 200MHz	1950	0.240	600
SWI0603CS 56N □-A1	56 @ 200MHz	G, J, K	32 @ 200MHz	1900	0.250	600
SWI0603CS 68N □-A1	68 @ 200MHz	G, J, K	32 @ 200MHz	1700	0.350	600
SWI0603CS 72N □-A1	72 @ 150MHz	G, J, K	34 @ 150MHz	1700	0.490	400
SWI0603CS 82N □-A1	82 @ 150MHz	G, J, K	30 @ 150MHz	1700	0.580	400
SWI0603CS R10 □-A1	100 @ 150MHz	G, J, K	34 @ 150MHz	1400	0.580	400
SWI0603CS R11 □-A1	110 @ 150MHz	G, J, K	33 @ 150MHz	1350	0.610	300
SWI0603CS R12 □-A1	120 @ 150MHz	G, J, K	30 @ 150MHz	1300	0.650	300
SWI0603CS R15 □-A1	150 @ 100MHz	G, J, K	30 @ 100MHz	990	0.850	280
SWI0603CS R18 □-A1	180 @ 100MHz	G, J, K	25 @ 100MHz	990	1.000	250
SWI0603CS R22 □-A1	220 @ 100MHz	G, J, K	25 @ 100MHz	900	1.800	250
SWI0603CS R27 □-A1	270 @ 100MHz	G, J, K	25 @ 100MHz	822	2.100	200
SWI0603CS R33 □-A1	330 @ 100MHz	J, K	25 @ 100MHz	500	2.300	150
SWI0603CS R39 □-A1	390 @ 100MHz	J, K	25 @ 100MHz	350	2.900	130
SWI0603CS R47 □-A1	470 @ 100MHz	J, K	22 @ 100MHz	350	3.780	120
SWI0603CS R56 □-A1	560 @ 100MHz	J, K	20 @ 100MHz	300	4.200	110
SWI0603CS R68 □-A1	680 @ 100MHz	J, K	18 @ 100MHz	230	4.650	100

Tolerance: B=±0.20nH S=±0.30nH G=±2% J=±5% K=±10%

1. Inductance is measured in HP-4287A RF LCR meter with HP-16193 fixture.
2. Q is measured in HP-4287A RF LCR meter with HP-16193 fixture.

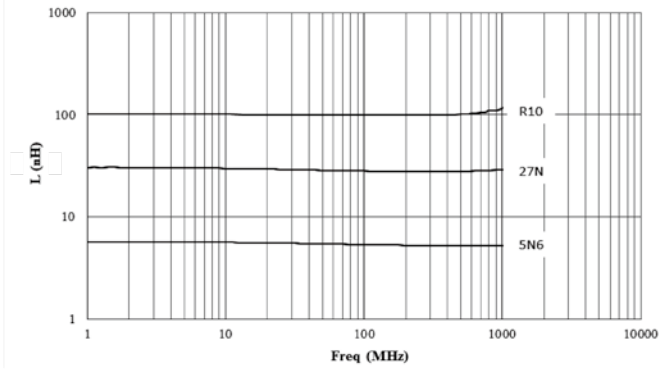
3. SRF is measured in ENA E5071B network analyzer or equivalent.

4. RDC is measured in HP-4338B milliohm meter or equivalent.

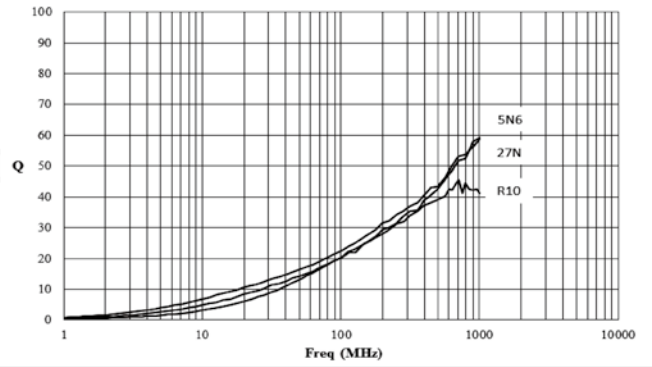
5. For 15 °C Rise.

SWI0402 CT Series

L vs Freq Plot

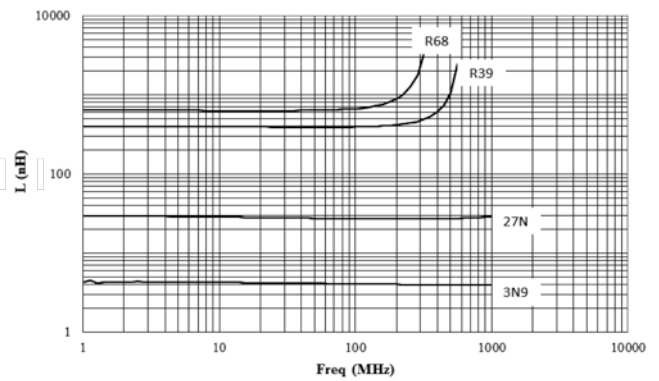


Q vs Freq Plot

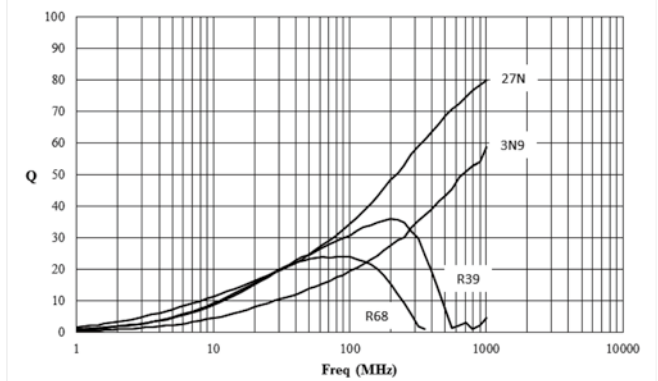


SWI0603 CS Series

L vs Freq Plot



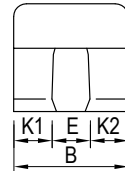
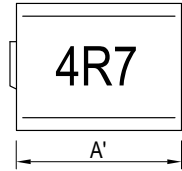
Q vs Freq Plot



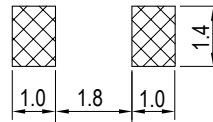
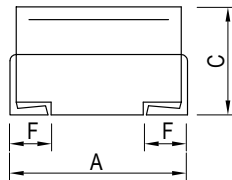
ACC
SERIES

3225 / 4532

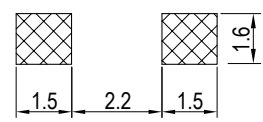
High current



※ $\Delta K = |K1 - K2| = 0.25^{+0}$ mm



ACC3225



ACC4532

(PCB Pattern)

Unit: mm

Series	A	A'	B	C	E	F
ACC3225	3.20±0.40	2.90±0.20	2.50±0.20	2.20±0.20	1.00±0.20	0.60 ^{+0.30} _{-0.00}
ACC4532	4.50±0.30	4.20±0.20	3.20±0.20	3.20±0.20	1.20	1.00 ^{+0.30} _{-0.00}

Features

- Wide range of inductance
- High Q
- High Current handling
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +150°C (including self-temperature rise)

Application

- Telematics
- Infotainment



ACC3225 Series

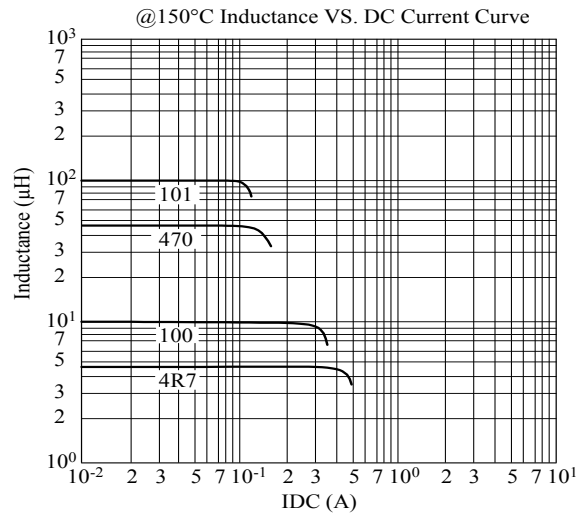
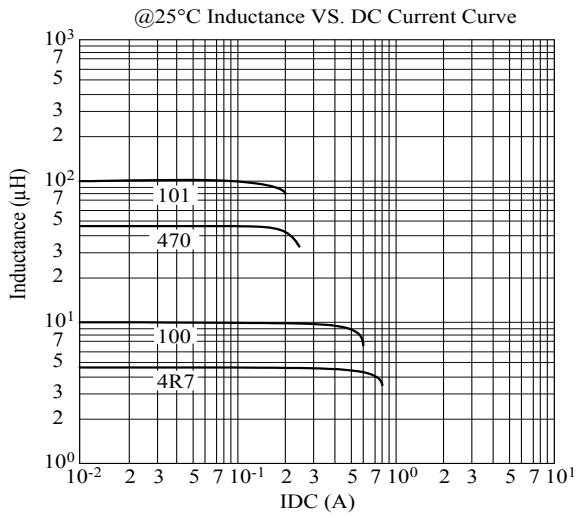
DWG. No.	Inductance (μH)	Tolerance	Q min.	Test Freq. (MHz)	SRF (MHz) min.	RDC (Ω) max.	Isat (A) typ.	Irms (A) max.
ACC3225R10□2B-□□□	0.10	M	5	25.200	550	0.050	4.000	2.800
ACC3225R15□2B-□□□	0.15	M	5	25.200	500	0.060	3.400	2.600
ACC3225R22□2B-□□□	0.22	M	5	25.200	440	0.070	3.000	2.400
ACC3225R33□2B-□□□	0.33	M	5	25.200	320	0.080	2.300	2.200
ACC3225R47□2B-□□□	0.47	M	5	25.200	230	0.095	1.850	1.850
ACC3225R68□2B-□□□	0.68	M	5	25.200	130	0.110	1.500	1.700
ACC32251R0□2B-□□□	1.00	K	8	7.960	100	0.156	1.350	1.450
ACC32251R5□2B-□□□	1.50	K	8	7.960	80	0.195	1.100	1.350
ACC32252R2□2B-□□□	2.20	K	8	7.960	65	0.250	1.000	1.150
ACC32253R3□2B-□□□	3.30	K	8	7.960	55	0.320	0.750	0.950
ACC32254R7□2B-□□□	4.70	J, K	8	7.960	46	0.380	0.700	0.900
ACC32256R8□2B-□□□	6.80	J, K	8	7.960	35	0.580	0.500	0.700
ACC3225100□2B-□□□	10.00	J, K	15	2.520	28	0.890	0.450	0.600
ACC3225120□2B-□□□	12.00	J, K	15	2.520	26	1.100	0.400	0.500
ACC3225150□2B-□□□	15.00	J, K	15	2.520	25	1.450	0.350	0.450
ACC3225220□2B-□□□	22.00	J, K	15	2.520	20	2.000	0.300	0.370
ACC3225330□2B-□□□	33.00	J, K	15	2.520	15	2.800	0.250	0.300
ACC3225470□2B-□□□	47.00	J, K	20	2.520	11	4.800	0.205	0.270
ACC3225680□2B-□□□	68.00	J, K	20	2.520	10	6.900	0.170	0.220
ACC3225101□2B-□□□	100.00	J, K	20	0.796	8	9.000	0.150	0.180

ACC4532 Series

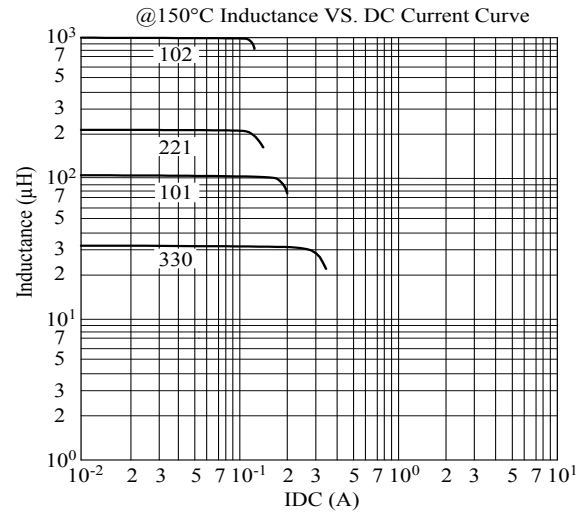
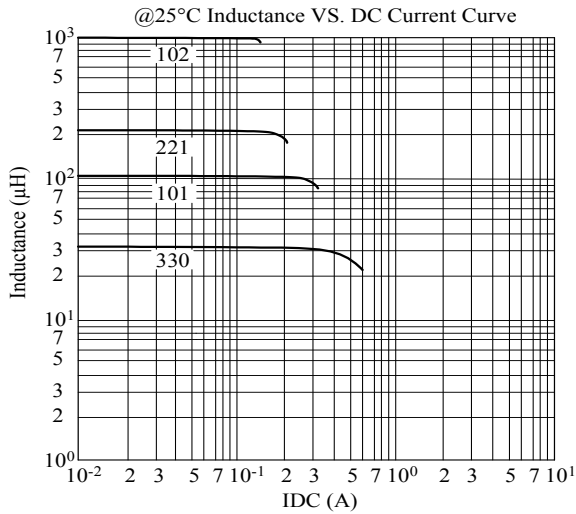
DWG. No.	Inductance (μH)	Tolerance	Q min.	Test Freq. (MHz)	SRF (MHz) min.	RDC (Ω) max.	Isat (A) typ.	Irms (A) max.
ACC45321R0□2□-□□□	1.00	K	10	7.960	180.0	0.100	2.25	2.30
ACC45321R5□2□-□□□	1.50	K	10	7.960	110.0	0.120	1.85	1.90
ACC45322R2□2□-□□□	2.20	K	10	7.960	70.0	0.170	1.55	1.60
ACC45323R3□2□-□□□	3.30	K	10	7.960	35.0	0.210	1.25	1.50
ACC45324R7□2□-□□□	4.70	K	10	7.960	30.0	0.260	1.05	1.30
ACC45326R8□2□-□□□	6.80	K	10	7.960	25.0	0.320	0.90	1.20
ACC4532100□2□-□□□	10.00	K	20	2.520	20.0	0.480	0.70	1.00
ACC4532150□2□-□□□	15.00	K	20	2.520	14.0	0.610	0.60	0.75
ACC4532220□2□-□□□	22.00	K	20	2.520	12.0	0.900	0.50	0.62
ACC4532330□2□-□□□	33.00	K	20	2.520	10.0	1.150	0.40	0.55
ACC4532470□2□-□□□	47.00	K	20	2.520	8.0	1.650	0.30	0.45
ACC4532680□2□-□□□	68.00	K	20	2.520	7.0	2.500	0.26	0.35
ACC4532101□2□-□□□	100.00	K	30	0.796	5.5	4.000	0.22	0.28
ACC4532151□2□-□□□	150.00	K	30	0.796	4.5	6.000	0.19	0.22
ACC4532221□2□-□□□	220.00	K	30	0.796	3.7	7.700	0.17	0.20
ACC4532331□2□-□□□	330.00	K	30	0.796	3.1	11.000	0.14	0.17
ACC4532471□2□-□□□	470.00	K	30	0.796	2.7	16.000	0.12	0.14
ACC4532681□2□-□□□	680.00	K	30	0.796	2.2	24.000	0.10	0.12
ACC4532102□2□-□□□	1000.00	K	20	0.252	2.0	40.000	0.08	0.09

1. Electrical specifications at 25°C
2. Isat base on ΔL/LOA=10% typ.
3. Irms base on temp. rise 40°C max.
4. Tolerance: J=±5% K=±10% M=±20%

ACC3225 Series



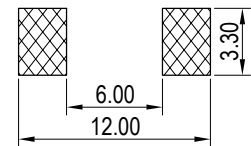
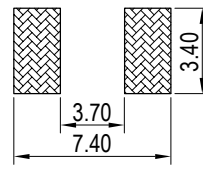
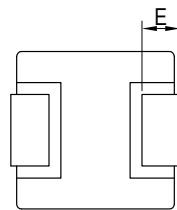
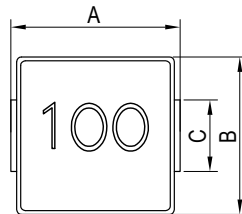
ACC4532 Series



MHE
SERIES

0630-T / 0640-T / 1040-T

Molded - High Current



MHE0630-T / MHE0640-T

MHE1040-T

(PCB Pattern)

Unit: mm

Series	A	B	C	D	E
MHE0630-T	7.10±0.30	6.60±0.30	3.00±0.30	3.00 max.	1.60±0.50
MHE0640-T	7.10±0.30	6.60±0.30	3.00±0.30	4.00 max.	1.60±0.50
MHE1040-T	11.50 max.	10.00±0.30	2.80±0.50	4.00 max.	2.00±0.50

Features

- Metal composite wire-wound construction
- Large current handling capability
- Lower RDC
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +155°C (including self-temperature rise)

Application

- LED lighting
- Engine Control Module
- ADAS
- BCM
- Other power suppliers



MHE0630-T Series

DWG. No.	Inductance (μ H)	RDC (m Ω)		Isat (A) typ.	Irms (A) typ.
		typ.	max.		
MHE0630R33MTB-□□□	0.33 \pm 20%	3.0	3.5	30.0	21.0
MHE0630R47MTB-□□□	0.47 \pm 20%	3.5	4.1	25.0	18.0
MHE0630R68MTB-□□□	0.68 \pm 20%	4.8	5.3	22.0	16.0
MHE0630R82MTB-□□□	0.82 \pm 20%	5.0	5.5	18.0	15.0
MHE06301R0MTB-□□□	1.00 \pm 20%	6.7	7.4	16.0	13.0
MHE06301R5MTB-□□□	1.50 \pm 20%	10.5	12.0	13.0	11.0
MHE06302R2MTB-□□□	2.20 \pm 20%	13.5	15.0	12.0	9.0
MHE06303R3MTB-□□□	3.30 \pm 20%	18.0	22.0	9.5	9.0
MHE06304R7MTB-□□□	4.70 \pm 20%	28.0	33.0	7.5	7.0
MHE06305R6MTB-□□□	5.60 \pm 20%	39.0	42.0	7.0	5.5
MHE06306R8MTB-□□□	6.80 \pm 20%	43.0	50.0	6.0	5.0
MHE0630100MTB-□□□	10.0 \pm 20%	62.0	68.0	5.5	4.5
MHE0630150MTB-□□□	15.0 \pm 20%	110.0	125.0	3.5	3.5
MHE0630220MTB-□□□	22.0 \pm 20%	140.0	160.0	3.0	3.0
MHE0630330MTB-□□□	33.0 \pm 20%	170.0	185.0	2.5	2.5

MHE0640-T Series

DWG. No.	Inductance (μ H)	RDC (m Ω)		Isat (A) typ.	Irms (A) typ.
		typ.	max.		
MHE06401R0MTB-□□□	1.0 \pm 20%	6.0	6.5	14.0	12.0
MHE06401R5MTB-□□□	1.5 \pm 20%	6.2	7.0	12.0	10.0
MHE06402R2MTB-□□□	2.2 \pm 20%	9.0	10.0	11.0	9.0
MHE06403R3MTB-□□□	3.3 \pm 20%	17.0	20.0	10.0	7.0
MHE06404R7MTB-□□□	4.7 \pm 20%	26.0	30.0	9.0	6.5
MHE06405R6MTB-□□□	5.6 \pm 20%	28.5	33.0	8.0	6.3
MHE06406R8MTB-□□□	6.8 \pm 20%	42.0	45.0	7.0	5.5
MHE06408R2MTB-□□□	8.2 \pm 20%	45.0	50.0	6.0	5.0
MHE0640100MTB-□□□	10.0 \pm 20%	49.0	55.0	5.0	4.5
MHE0640220MTB-□□□	22.0 \pm 20%	120.0	130.0	3.5	3.0
MHE0640330MTB-□□□	33.0 \pm 20%	180.0	200.0	2.7	3.2
MHE0640470MTB-□□□	47.0 \pm 20%	220.0	240.0	2.3	3.0
MHE0640680MTB-□□□	68.0 \pm 20%	260.0	290.0	2.0	1.5

MHE1040-T Series

DWG. No.	Inductance (μ H)	RDC (m Ω)		Isat (A) typ.	Irms (A) typ.
		typ.	max.		
MHE10402R2MTB-□□□	2.20 \pm 20%	6.50	7.00	18.00	15.00
MHE10403R3MTB-□□□	3.30 \pm 20%	9.50	10.50	15.00	12.00
MHE10404R7MTB-□□□	4.70 \pm 20%	12.50	14.00	13.00	11.00
MHE10405R6MTB-□□□	5.60 \pm 20%	15.80	17.80	12.00	10.00
MHE10406R8MTB-□□□	6.80 \pm 20%	19.00	21.00	10.00	9.00
MHE1040100MTB-□□□	10.0 \pm 20%	29.80	32.80	8.50	7.50
MHE1040150MTB-□□□	15.0 \pm 20%	38.00	43.00	6.50	6.50
MHE1040220MTB-□□□	22.0 \pm 20%	54.50	60.00	5.00	6.00
MHE1040330MTB-□□□	33.0 \pm 20%	77.50	85.00	4.50	5.00
MHE1040470MTB-□□□	47.0 \pm 20%	120.00	130.00	3.00	4.50
MHE1040560MTB-□□□	56.0 \pm 20%	140.00	155.00	2.80	4.00
MHE1040680MTB-□□□	68.0 \pm 20%	155.00	170.00	2.50	3.50
MHE1040820MTB-□□□	82.0 \pm 20%	180.00	200.00	2.20	3.00
MHE1040101MTB-□□□	100.0 \pm 20%	280.00	300.00	2.00	2.50

1. Electrical specifications at 25°C

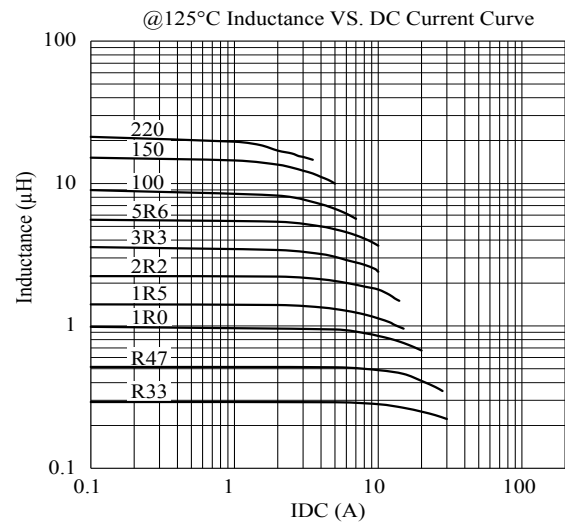
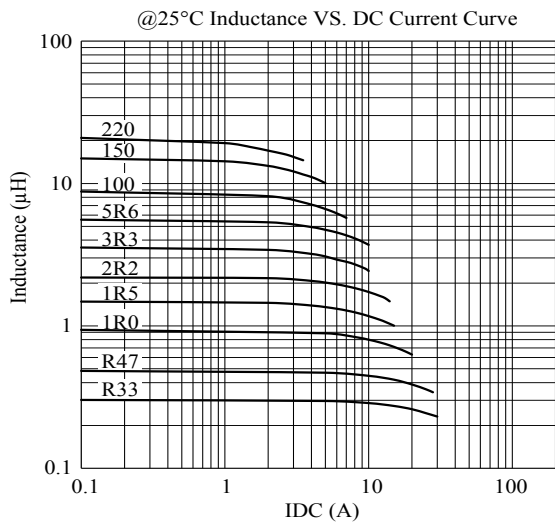
2. Inductance Test Condition: 500kHz / 0.25V

 3. Isat base on Δ L/L0A=30% typ.

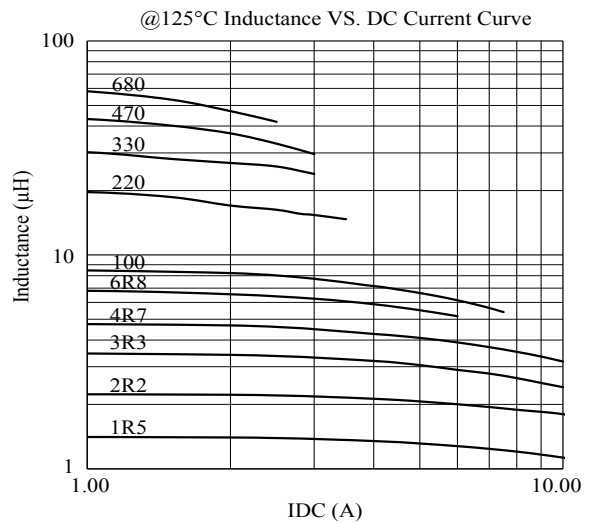
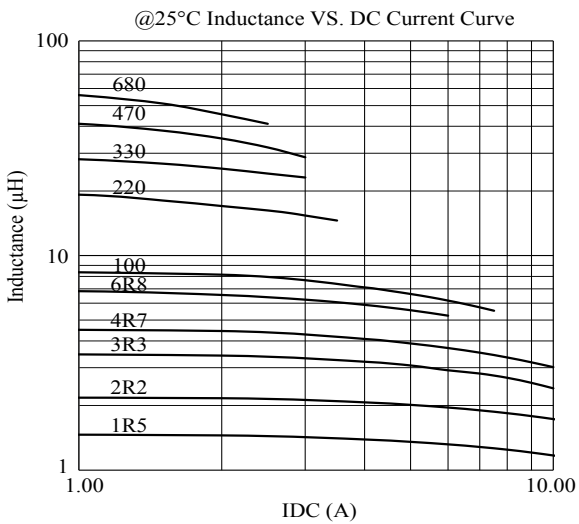
4. Irms base on Temp. rise 40°C typ.

5. Rated Voltage: 50V max.

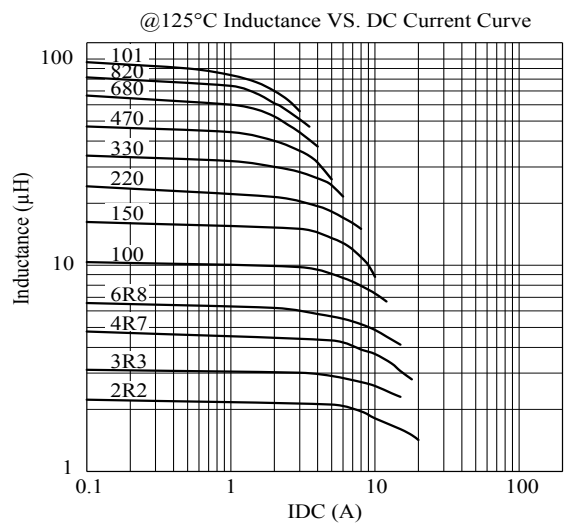
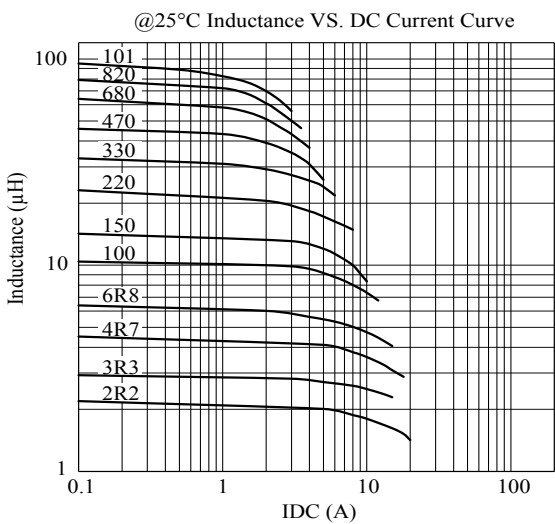
MHE0630-T Series



MHE0640-T Series



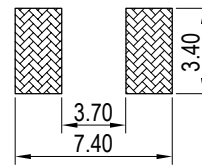
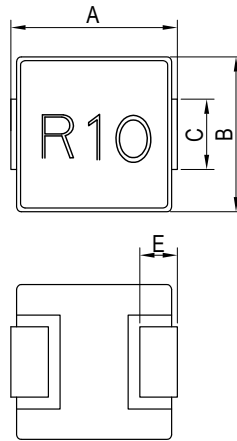
MHE1040-T Series



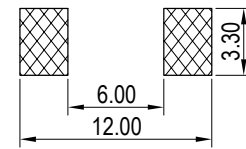
MHE
SERIES

0630-Q / 1040-Q

Molded - High Saturation Current



MHE0630-Q



MHE1040-Q

(PCB Pattern)

Unit: mm

Series	A	B	C	D	E
MHE0630-Q	7.10±0.30	6.60±0.30	3.00±0.30	3.00 max.	1.60±0.50
MHE1040-Q	11.50 max.	10.00±0.30	2.80±0.50	4.00 max.	2.00±0.50

Features

- Metal composite wire-wound construction
- Handles high transient current spikes without saturation
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +155°C (including self-temperature rise)

Application

- LED lighting
- Engine Control Module
- ADAS
- BCM
- Other power suppliers

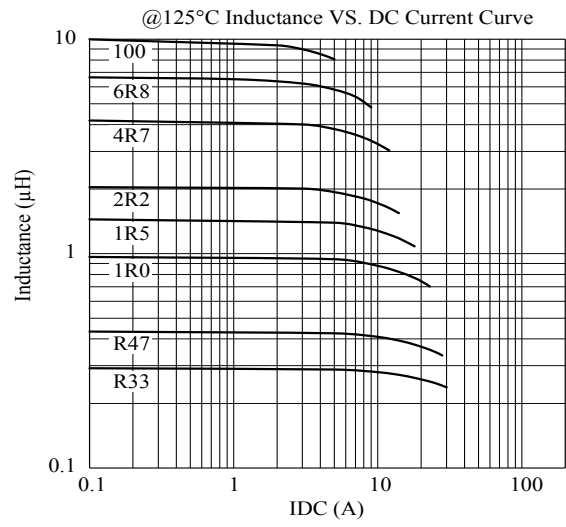
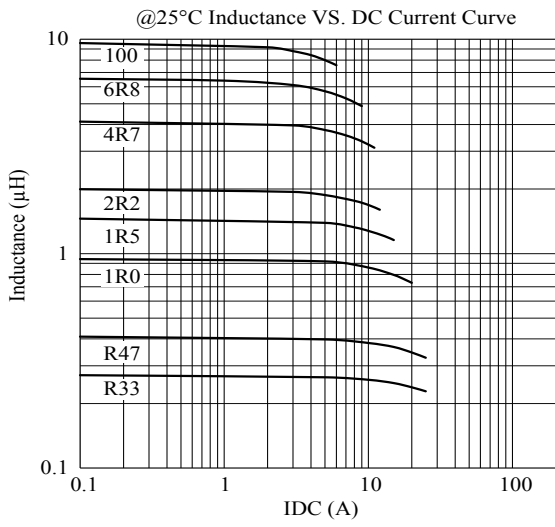


MHE0630-Q Series							
DWG. No.	Inductance (μ H)	Q ref.	SRF (MHz) typ.	RDC (m Ω)		Isat (A) typ.	Irms (A) typ.
				typ.	max.		
MHE0630R10MQB-□□□	0.10 \pm 20%	14	200	1.5	1.7	70.0	34.0
MHE0630R22MQB-□□□	0.22 \pm 20%	12	145	2.5	2.8	50.0	25.5
MHE0630R33MQB-□□□	0.33 \pm 20%	12	140	3.5	3.9	35.0	21.5
MHE0630R47MQB-□□□	0.47 \pm 20%	10	80	4.0	4.2	30.0	21.0
MHE0630R56MQB-□□□	0.56 \pm 20%	12	78	5.0	5.5	28.0	18.0
MHE0630R68MQB-□□□	0.68 \pm 20%	8	75	5.1	5.5	28.0	17.5
MHE0630R82MQB-□□□	0.82 \pm 20%	8	68	6.7	7.8	26.0	14.0
MHE06301R0MQB-□□□	1.00 \pm 20%	30	58	9.0	10.0	25.0	12.0
MHE06301R5MQB-□□□	1.50 \pm 20%	30	45	14.0	15.0	18.0	10.0
MHE06302R2MQB-□□□	2.20 \pm 20%	30	30	18.0	20.0	14.0	10.0
MHE06303R3MQB-□□□	3.30 \pm 20%	24	25	28.0	30.0	13.5	8.0
MHE06304R7MQB-□□□	4.70 \pm 20%	21	22	37.0	40.0	11.0	6.0
MHE06305R6MQB-□□□	5.60 \pm 20%	21	20	52.0	60.0	10.5	5.8
MHE06306R8MQB-□□□	6.80 \pm 20%	26	17	54.0	60.0	9.0	5.5
MHE06308R2MQB-□□□	8.20 \pm 20%	26	12	64.0	68.0	7.5	5.0
MHE0630100MQB-□□□	10.0 \pm 20%	26	10	102.0	105.0	7.0	4.0

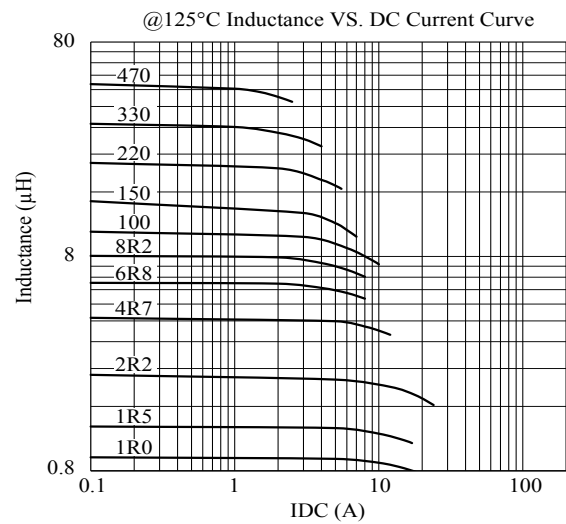
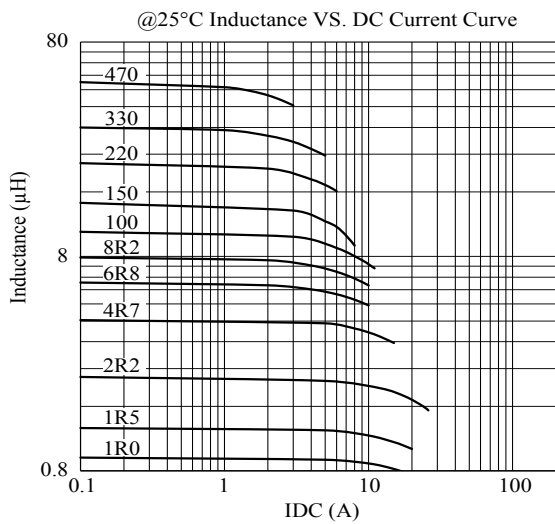
MHE1040-Q Series					
DWG. No.	Inductance (μ H)	RDC (m Ω)		Isat (A) typ.	Irms (A) typ.
		typ.	max.		
MHE1040R68MQ□-□□□	0.68 \pm 20%	1.90	2.40	35.00	23.00
MHE10401R0MQ□-□□□	1.00 \pm 20%	3.00	3.30	31.00	18.00
MHE10401R5MQ□-□□□	1.50 \pm 20%	3.80	4.20	27.00	16.00
MHE10402R2MQ□-□□□	2.20 \pm 20%	6.70	7.00	24.00	12.00
MHE10403R3MQ□-□□□	3.30 \pm 20%	10.80	11.80	19.00	10.00
MHE10404R7MQ□-□□□	4.70 \pm 20%	15.00	16.50	17.00	9.50
MHE10405R6MQ□-□□□	5.60 \pm 20%	17.60	19.30	16.00	8.50
MHE10406R8MQ□-□□□	6.80 \pm 20%	21.20	23.30	13.00	8.00
MHE10408R2MQ□-□□□	8.20 \pm 20%	26.00	29.00	10.00	7.00
MHE1040100MQ□-□□□	10.0 \pm 20%	33.20	36.50	9.00	6.80
MHE1040150MQ□-□□□	15.0 \pm 20%	40.00	45.00	7.00	6.25
MHE1040220MQ□-□□□	22.0 \pm 20%	60.00	66.00	5.50	5.00
MHE1040330MQ□-□□□	33.0 \pm 20%	85.00	92.00	5.00	4.40
MHE1040470MQ□-□□□	47.0 \pm 20%	130.00	145.00	3.50	4.00

1. Electrical specifications at 25°C
2. Inductance Test Condition: 500kHz / 0.25V
3. Isat base on $\Delta L/L0A=30\%$ typ.
4. Irms base on Temp. rise 40°C typ.
5. Rated Voltage: 50V max.

MHE0630-Q Series



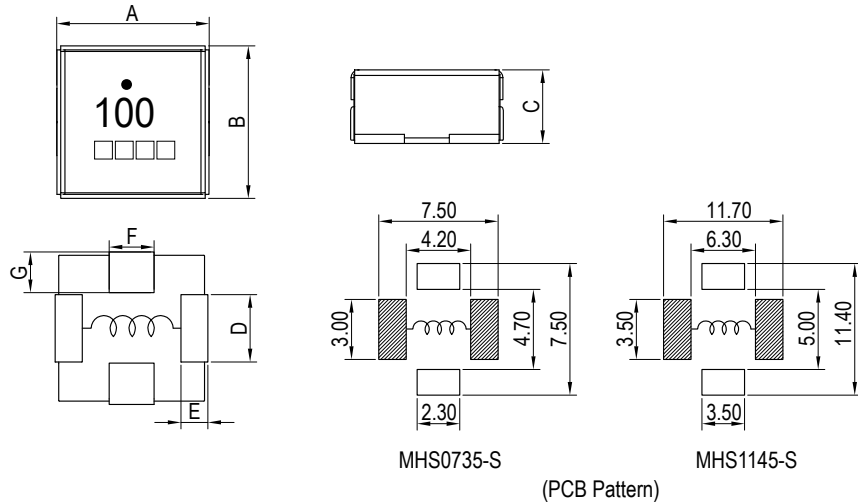
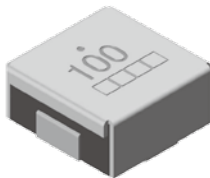
MHE1040-Q Series



MHS
SERIES

0735-S / 1145-S

Metal Cover Molded



Unit: mm

Series	A	B	C	D	E	F	G
MHS0735-S	7.20±0.30	7.20±0.30	3.50 max.	2.80±0.30	1.50±0.30	2.10±0.30	1.20±0.30
MHS1145-S	11.50 max.	10.7±0.50	4.50 max.	2.80±0.50	2.00±0.50	3.00±0.30	2.50±0.50

Features

- Metal E-Shielded
- Large current handling capability
- Low RDC
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +155°C (including self-temperature rise)

Application

- LED lighting
- Engine Control Module
- DC/DC converters
- Noise suppression for motors
- HVAC



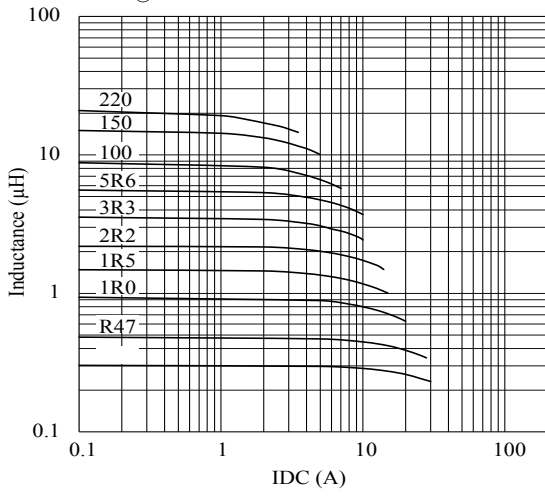
MHS0735-S Series					
DWG. No.	Inductance (μ H)	RDC (m Ω)		Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.		
MHS0735R33MS□-□□□	0.33 \pm 20%	3.0	3.5	30.0	21.0
MHS0735R47MS□-□□□	0.47 \pm 20%	3.5	4.1	25.0	18.0
MHS0735R68MS□-□□□	0.68 \pm 20%	4.8	5.3	22.0	16.0
MHS0735R82MS□-□□□	0.82 \pm 20%	5.0	5.5	18.0	15.0
MHS07351R0MS□-□□□	1.00 \pm 20%	6.7	7.4	16.0	13.0
MHS07351R5MS□-□□□	1.50 \pm 20%	10.5	12.0	13.0	11.0
MHS07352R2MS□-□□□	2.20 \pm 20%	13.5	15.0	12.0	9.0
MHS07353R3MS□-□□□	3.30 \pm 20%	18.0	22.0	9.5	9.0
MHS07354R7MS□-□□□	4.70 \pm 20%	28.0	33.0	7.5	7.0
MHS07355R6MS□-□□□	5.60 \pm 20%	39.0	42.0	7.0	5.5
MHS07356R8MS□-□□□	6.80 \pm 20%	43.0	50.0	6.0	5.0
MHS0735100MS□-□□□	10.0 \pm 20%	62.0	68.0	5.5	4.5
MHS0735150MS□-□□□	15.0 \pm 20%	110.0	125.0	3.5	3.5
MHS0735220MS□-□□□	22.0 \pm 20%	140.0	160.0	3.0	3.0
MHS0735330MS□-□□□	33.0 \pm 20%	170.0	185.0	2.5	2.5

MHS1145-S Series					
DWG. No.	Inductance (μ H)	RDC (m Ω)		Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.		
MHS11452R2MSB-□□□	2.20 \pm 20%	6.50	7.00	18.00	15.00
MHS11453R3MSB-□□□	3.30 \pm 20%	9.50	10.50	15.00	12.00
MHS11454R7MSB-□□□	4.70 \pm 20%	12.50	14.00	13.00	11.00
MHS11455R6MSB-□□□	5.60 \pm 20%	15.80	17.80	12.00	10.00
MHS11456R8MSB-□□□	6.80 \pm 20%	19.00	21.00	10.00	9.00
MHS1145100MSB-□□□	10.0 \pm 20%	29.80	32.80	8.50	7.50
MHS1145150MSB-□□□	15.0 \pm 20%	38.00	43.00	6.50	6.50
MHS1145220MSB-□□□	22.0 \pm 20%	54.50	60.00	5.00	6.00
MHS1145330MSB-□□□	33.0 \pm 20%	77.50	85.00	4.50	5.00
MHS1145470MSB-□□□	47.0 \pm 20%	120.00	130.00	3.00	4.50
MHS1145560MSB-□□□	56.0 \pm 20%	140.00	155.00	2.80	4.00
MHS1145680MSB-□□□	68.0 \pm 20%	155.00	170.00	2.50	3.50
MHS1145820MSB-□□□	82.0 \pm 20%	180.00	200.00	2.20	3.00
MHS1145101MSB-□□□	100.0 \pm 20%	280.00	300.00	2.00	2.50

1. Electrical specifications at 25°C
2. Inductance Test Condition: 500kHz / 0.25V
3. Isat base on $\Delta L/L_{OA}=30\%$ typ.
4. I_{rms} base on Temp. rise 40°C typ.
5. Rated Voltage: 50V max.

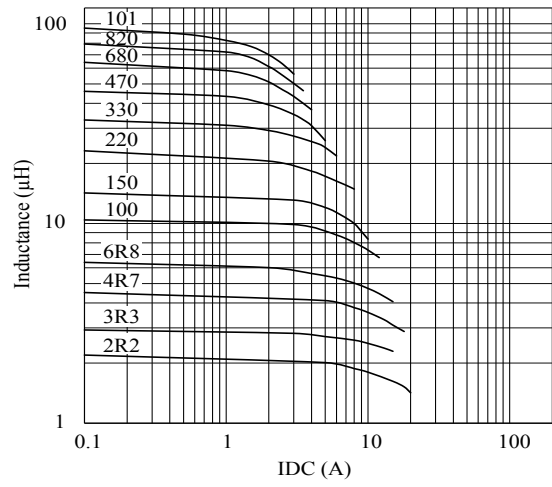
MHS0735 Series

@25°C Inductance VS. DC Current Curve



MHS1145 Series

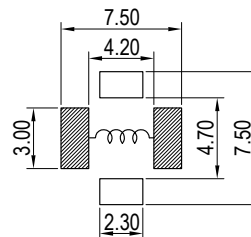
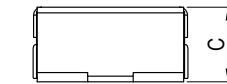
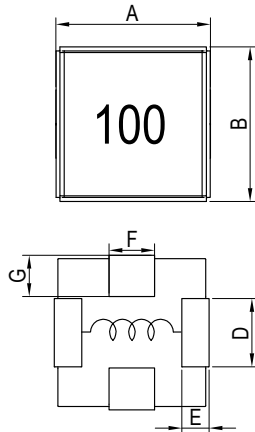
@25°C Inductance VS. DC Current Curve



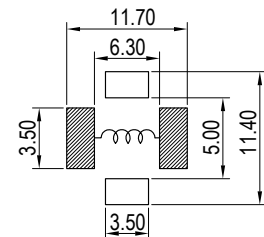
MHS
SERIES

0735-E / 1145-E

Metal Cover Molded - High Saturation



MHS0735-E



MHS1145-E

(PCB Pattern)

Unit: mm

Series	A	B	C	D	E	F	G
MHS0735-E	7.20±0.30	7.20±0.30	3.50 max.	2.80±0.30	1.50±0.30	2.10±0.30	1.20±0.30
MHS1145-E	11.50 max.	10.7±0.50	4.50 max.	2.80±0.50	2.00±0.50	3.00±0.30	2.50±0.50

Features

- Metal composite wire-wound construction
- Handles high transient current spikes without saturation
- Lower RDC
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +155°C (including self-temperature rise)

Application

- LED lighting
- Engine Control Module
- DC/DC converters
- Noise suppression for motors
- HVAC

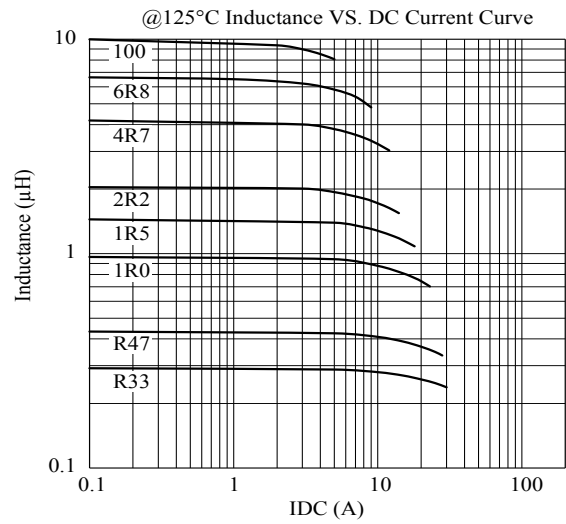
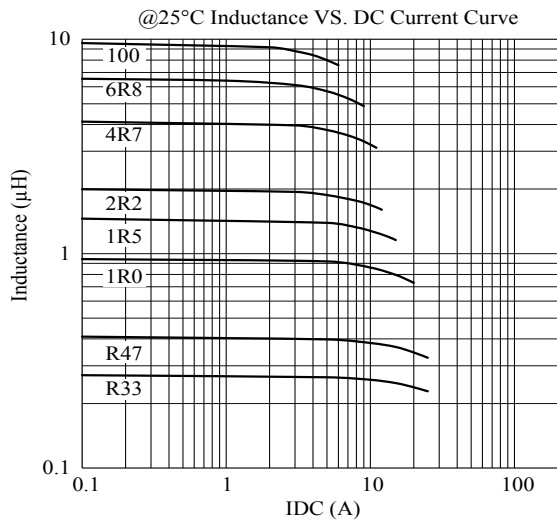


HS0735-S Series					
DWG. No.	Inductance (μ H)	RDC (m Ω)		Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.		
MHS0735R10MEB-□□□	0.10 \pm 20%	1.5	1.7	70.0	34.0
MHS0735R22MEB-□□□	0.22 \pm 20%	2.5	2.8	50.0	25.5
MHS0735R33MEB-□□□	0.33 \pm 20%	3.5	3.9	35.0	21.5
MHS0735R47MEB-□□□	0.47 \pm 20%	4.0	4.2	30.0	21.0
MHS0735R56MEB-□□□	0.56 \pm 20%	5.0	5.5	28.0	18.0
MHS0735R68MEB-□□□	0.68 \pm 20%	5.1	5.5	28.0	17.5
MHS0735R82MEB-□□□	0.82 \pm 20%	6.7	7.8	26.0	14.0
MHS0735R10MEB-□□□	1.00 \pm 20%	9.0	10.0	25.0	12.0
MHS0735R15MEB-□□□	1.50 \pm 20%	14.0	15.0	18.0	10.0
MHS0735R22MEB-□□□	2.20 \pm 20%	18.0	20.0	14.0	10.0
MHS0735R33MEB-□□□	3.30 \pm 20%	28.0	30.0	13.5	8.0
MHS0735R47MEB-□□□	4.70 \pm 20%	37.0	40.0	11.0	6.0
MHS0735R6MEB-□□□	5.60 \pm 20%	52.0	60.0	10.5	5.8
MHS0735R8MEB-□□□	6.80 \pm 20%	54.0	60.0	9.0	5.5
MHS0735R82MEB-□□□	8.20 \pm 20%	64.0	68.0	7.5	5.0
MHS0735100MEB-□□□	10.0 \pm 20%	102.0	105.0	7.0	4.0

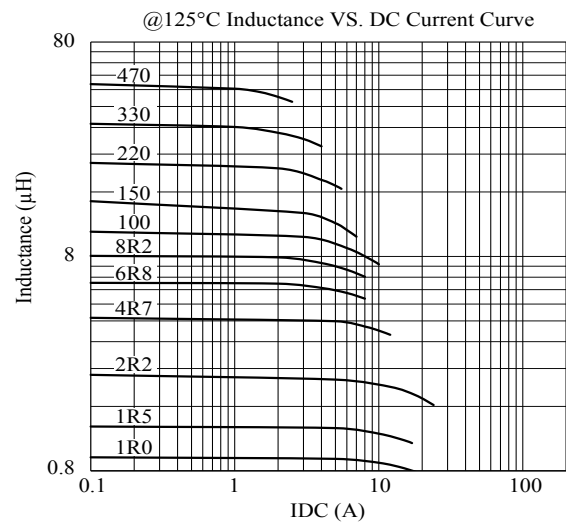
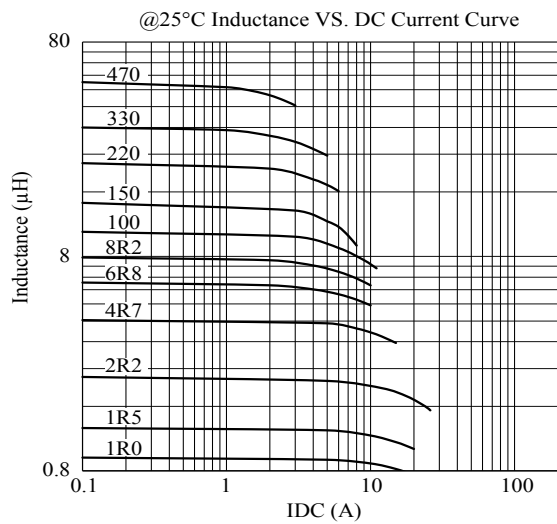
HS1145-S Series					
DWG. No.	Inductance (μ H)	RDC (m Ω)		Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.		
MHS1145R10MEB-□□□	1.00 \pm 20%	3.00	3.30	31.00	18.00
MHS1145R15MEB-□□□	1.50 \pm 20%	3.80	4.20	27.00	16.00
MHS1145R22MEB-□□□	2.20 \pm 20%	6.70	7.00	24.00	12.00
MHS1145R33MEB-□□□	3.30 \pm 20%	10.80	11.80	19.00	10.00
MHS1145R47MEB-□□□	4.70 \pm 20%	15.00	16.50	17.00	9.50
MHS1145R6MEB-□□□	5.60 \pm 20%	17.60	19.30	16.00	8.50
MHS1145R8MEB-□□□	6.80 \pm 20%	21.20	23.30	13.00	8.00
MHS1145R82MEB-□□□	8.20 \pm 20%	26.00	29.00	10.00	7.00
MHS1145100MEB-□□□	10.00 \pm 20%	33.20	36.50	9.00	6.80
MHS1145150MEB-□□□	15.00 \pm 20%	40.00	45.00	7.00	6.25
MHS1145220MEB-□□□	22.00 \pm 20%	60.00	66.00	5.50	5.00
MHS1145330MEB-□□□	33.00 \pm 20%	85.00	92.00	5.00	4.40
MHS1145470MEB-□□□	47.00 \pm 20%	130.00	145.00	3.50	4.00
MHS1145680MEB-□□□	68.00 \pm 20%	155.00	170.00	3.00	3.50

1. Electrical specifications at 25°C
2. Inductance Test Condition: 500kHz / 0.25V
3. Isat base on Δ L/LOA=30% typ.
4. I_{rms} base on Temp. rise 40°C typ.
5. Rated Voltage: 50V max.

MHS0735-E Series



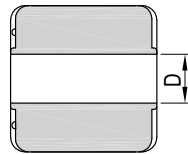
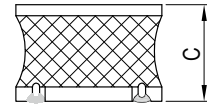
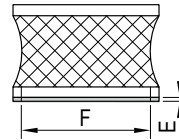
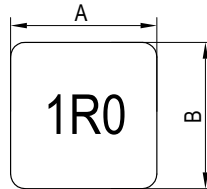
MHS1145-E Series



MSN
SERIES

3030 / 4030 / 5030 / 5040 / 6045

Semi-shielded



For PCB pattern information,
please see page 24



Unit: mm

Series	A	B	C	D	E	F
MSN3030	3.00±0.20	3.00±0.20	3.00 max.	1.00 typ.	0.12 min.	2.80±0.20
MSN4030	4.00±0.20	4.00±0.20	3.00 max.	1.80 typ.	0.10 min.	3.50±0.20
MSN5030	5.00±0.2	5.00±0.2	3.00 max.	1.80 typ.	0.20 min.	4.00±0.20
MSN5040	5.00±0.20	5.00±0.20	4.00 max.	1.50 typ.	-	-
MSN6045	6.00±0.20	6.00±0.20	4.70 max.	2.40 typ.	0.30 min.	5.00±0.20

Features

- Magnetic resin coating onto coil
- Semi-shielded effect to reduce leakage field
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- Telematics
- Infotainment
- BCM



MSN3030 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (Hz)		SRF (MHz) typ.	RDC (mΩ) max.	Isat (A) typ.	Irms (A) typ.
			L	Q				
MSN30301R0YSB-□□□	1.00±30%	13	100k/0.1V	7.96M	122	55.0	5.00	2.60
MSN30302R2YSB-□□□	2.20±30%	14	100k/0.1V	7.96M	66	85.0	3.50	2.10
MSN30304R7YSB-□□□	4.70±30%	15	100k/0.1V	7.96M	37	200.0	2.40	1.40
MSN3030100MSB-□□□	10.00±20%	20	100k/0.1V	2.52M	25	450.0	1.60	0.90
MSN3030220MSB-□□□	22.00±20%	25	100k/0.1V	2.52M	16	1100.0	1.10	0.55
MSN3030470MSB-□□□	47.00±20%	27	100k/0.1V	2.52M	10	2050.0	0.75	0.35
MSN3030101MSB-□□□	100.00±20%	33	100k/0.1V	0.796M	7	5000.0	0.50	0.25

MSN4030 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (Hz)		SRF (MHz) typ.	RDC (mΩ) max.	Isat (A) typ.	Irms (A) typ.
			L	Q				
MSN40301R0YSB-□□□	1.00±30%	15	100k/0.1V	7.96M	100	20.0	7.80	5.50
MSN40302R2YSB-□□□	2.20±30%	14	100k/0.1V	7.96M	47	30.0	4.90	4.30
MSN40303R3YSB-□□□	3.30±30%	13	100k/0.1V	7.96M	39	50.0	4.00	3.40
MSN40304R7YSB-□□□	4.70±30%	13	100k/0.1V	7.96M	31	60.0	3.50	3.10
MSN4030100MSB-□□□	10.00±20%	17	100k/0.1V	2.52M	20	180.0	2.20	1.80
MSN4030220MSB-□□□	22.00±20%	18	100k/0.1V	2.52M	13	330.0	1.50	1.20
MSN4030470MSB-□□□	47.00±20%	19	100k/0.1V	2.52M	8	650.0	1.05	0.85
MSN4030101MSB-□□□	100.00±20%	26	100k/0.1V	0.796M	7	1450.0	0.70	0.55

MSN5030 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (Hz)		SRF (MHz) typ.	RDC (mΩ) max.	Isat (A) typ.	Irms (A) typ.
			L	Q				
MSN5030R47YSB-□□□	0.47±30%	14.0	100k/0.1V	7.96M	171.0	12.0	10.00	7.00
MSN50301R0YSB-□□□	1.00±30%	14.0	100k/0.1V	7.96M	124.0	18.0	7.20	5.00
MSN50301R5YSB-□□□	1.50±30%	13.0	100k/0.1V	7.96M	67.0	26.0	6.40	4.20
MSN50302R2YSB-□□□	2.20±30%	14.0	100k/0.1V	7.96M	57.0	33.0	4.90	3.70
MSN50304R7YSB-□□□	4.70±30%	13.0	100k/0.1V	7.96M	39.0	53.0	3.50	2.70
MSN5030100MSB-□□□	10.00±20%	18.0	100k/0.1V	2.52M	24.0	105.0	2.10	1.70
MSN5030150MSB-□□□	15.00±20%	19.0	100k/0.1V	2.52M	20.0	190.0	1.80	1.50
MSN5030220MSB-□□□	22.00±20%	14.0	100k/0.1V	2.52M	15.0	220.0	1.40	1.30
MSN5030470MSB-□□□	47.00±20%	16.0	100k/0.1V	2.52M	10.0	450.0	0.95	0.80
MSN5030101MSB-□□□	100.00±20%	30.0	100k/0.1V	0.796M	7.0	1400.0	0.65	0.45

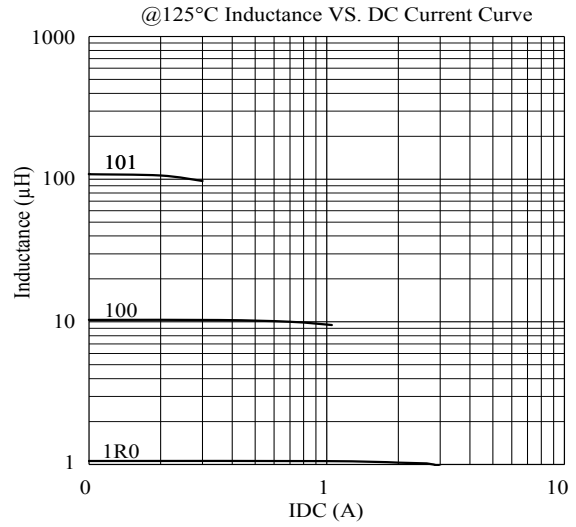
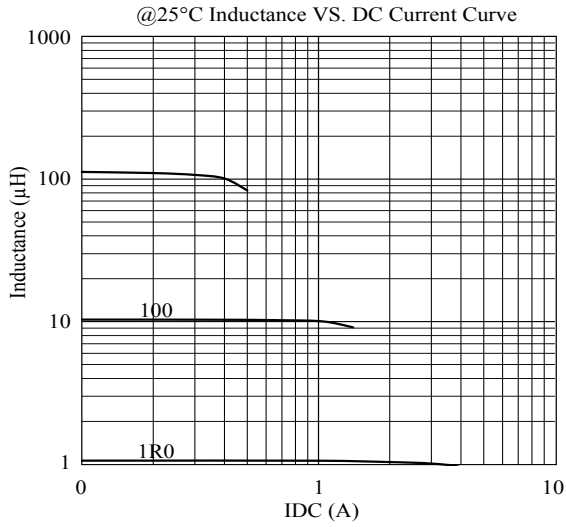
MSN5040 Series

DWG. No.	Inductance (μH)	Test Freq. (Hz)	SRF (MHz) typ.	RDC (mΩ) max.	Isat (A) typ.	Irms (A) typ.
MSN50401R5YSB-□□□	1.50±30%	100k/1V	85.0	18.0	7.00	5.20
MSN50402R2YSB-□□□	2.20±30%	100k/1V	55.0	20.0	5.00	4.50
MSN50403R3MSB-□□□	3.30±20%	100k/1V	45.0	26.0	4.50	4.00
MSN50404R7MSB-□□□	4.70±20%	100k/1V	40.0	35.0	3.80	3.50
MSN50406R8MSB-□□□	6.80±20%	100k/1V	30.0	59.0	3.20	2.60
MSN50408R2MSB-□□□	8.20±20%	100k/1V	25.0	65.0	2.80	2.40
MSN5040100MSB-□□□	10.00±20%	100k/1V	22.0	67.0	2.60	2.30
MSN5040150MSB-□□□	15.00±20%	100k/1V	20.0	96.0	2.20	2.00
MSN5040220MSB-□□□	22.00±20%	100k/1V	17.0	151.0	1.80	1.60
MSN5040270MSB-□□□	27.00±20%	100k/1V	15.0	198.0	1.70	1.40
MSN5040330MSB-□□□	33.00±20%	100k/1V	13.0	216.0	1.40	1.30
MSN5040470MSB-□□□	47.00±20%	100k/1V	10.0	320.0	1.30	1.10

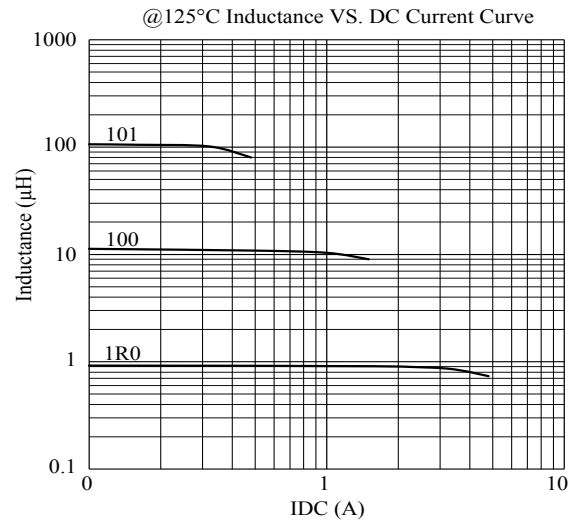
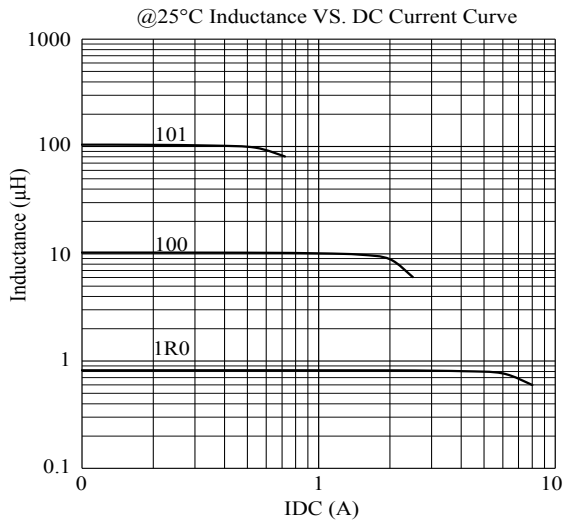
MSN6045 Series									
DWG. No.	Inductance (μH)	Q ref.	Test Freq. (Hz)		RDC (mΩ)		SRF (MHz) typ.	Isat (A) typ.	I _{rms} (A) typ.
			L	Q	typ.	max.			
MSN6045R55YSB-□□□	0.55±30%	19.0	100k/0.1V	7.96M	4.80	6.00	135	18.00	7.00
MSN60451R0YSB-□□□	1.00±30%	17.0	100k/0.1V	7.96M	7.30	9.00	80	14.50	6.50
MSN60451R5YSB-□□□	1.50±30%	17.0	100k/0.1V	7.96M	12.90	15.00	55	11.00	5.00
MSN60452R2YSB-□□□	2.20±30%	17.0	100k/0.1V	7.96M	17.00	23.00	50	9.50	4.40
MSN60453R3YSB-□□□	3.30±30%	20.0	100k/0.1V	7.96M	23.00	30.00	40	8.00	4.00
MSN60454R7YSB-□□□	4.70±30%	20.0	100k/0.1V	7.96M	30.00	35.00	30	7.00	3.60
MSN6045100MSB-□□□	10.00±20%	20.0	100k/0.1V	2.52M	41.00	50.00	20	4.00	2.60
MSN6045220MSB-□□□	22.00±20%	24.0	100k/0.1V	2.52M	121.00	144.00	13	2.50	1.70
MSN6045330MSB-□□□	33.00±20%	24.0	100k/0.1V	2.52M	170.00	211.00	10	2.20	1.50
MSN6045470MSB-□□□	47.00±20%	23.0	100k/0.1V	2.52M	224.00	305.00	8	1.90	1.00
MSN6045680MSB-□□□	68.00±20%	23.0	100k/0.1V	2.52M	316.00	400.00	7	1.60	0.90
MSN6045101MSB-□□□	100.00±20%	23.0	100k/0.1V	0.796M	484.00	540.00	6	1.20	0.72

1. Electrical specifications at 25°C
2. Isat base on ΔL/LOA=30% typ.
3. I_{rms} base on Temp. rise 40°C typ.

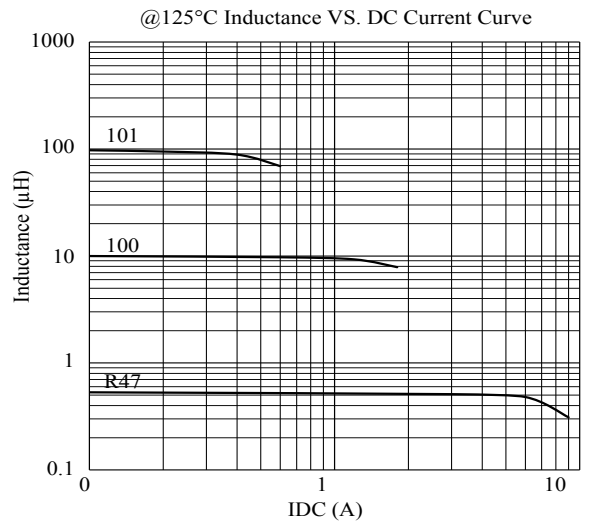
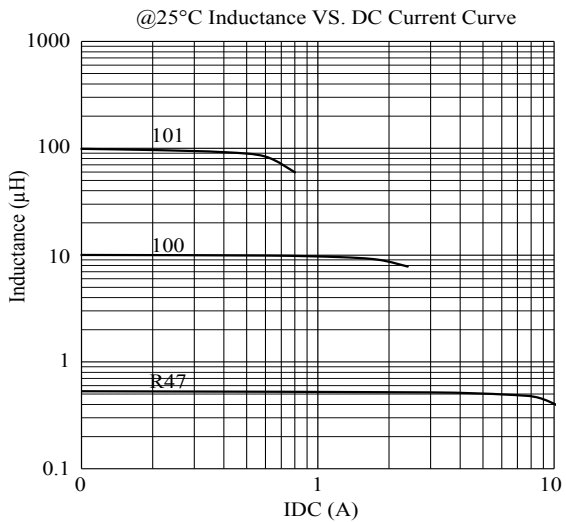
MSN3030 Series



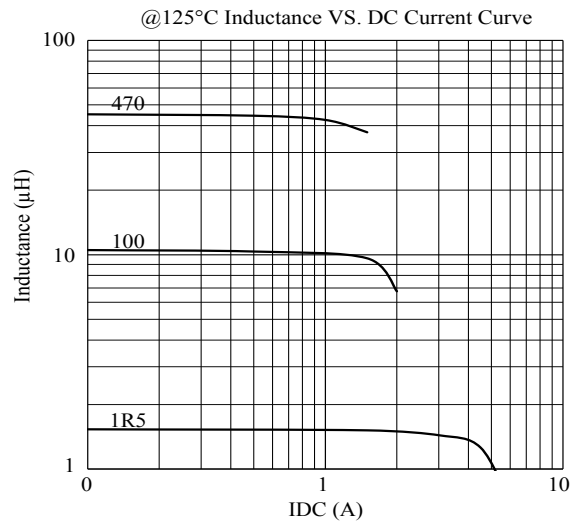
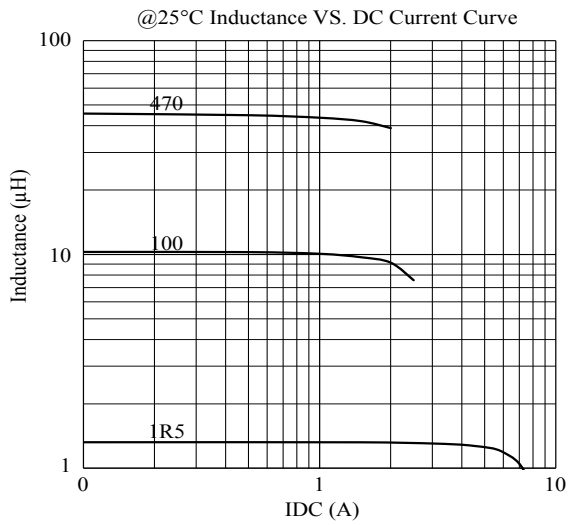
MSN4030 Series



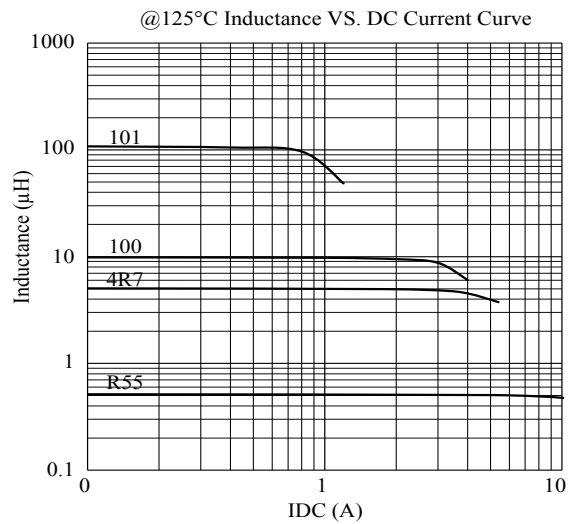
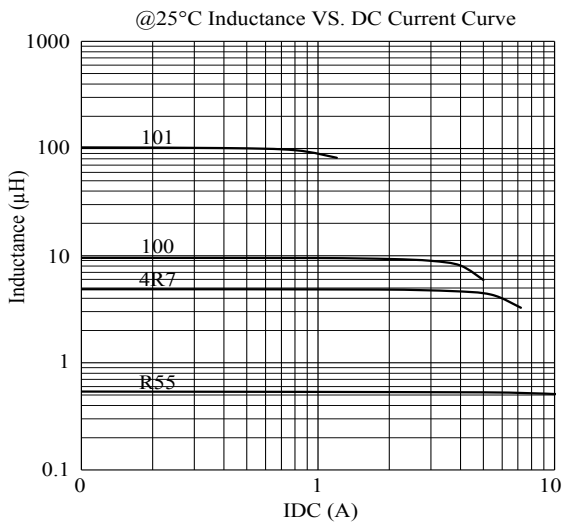
MSN5030 Series



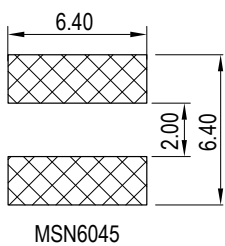
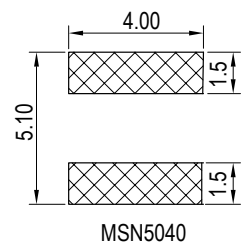
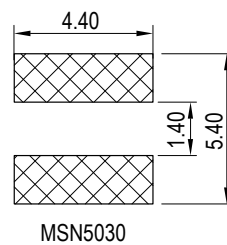
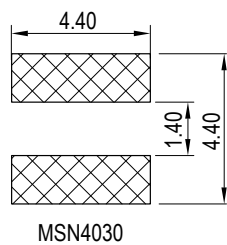
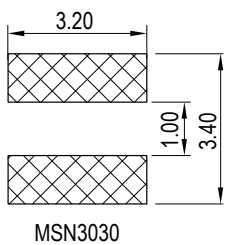
MSN5040 Series



MSN6045 Series



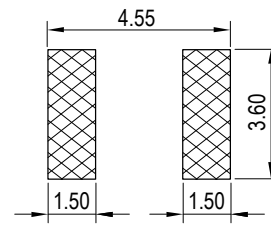
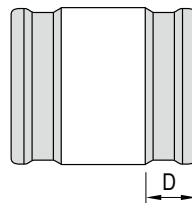
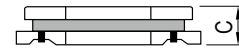
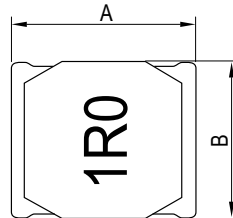
PCB Pattern



TPI
SERIES

4018CT-A1

Semi-shielded



(PCB Pattern)

Unit: mm

Series	A	B	C	D
TPI4018CT-A1	4.00±0.20	4.00±0.20	1.88 max. (R82~2R7) 1.80 max. (3R3~221)	1.30 typ.

Features

- Magnetic resin coating onto coil
- Semi-shielded effect to reduce leakage field
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- Telematics
- Infotainment
- BCM

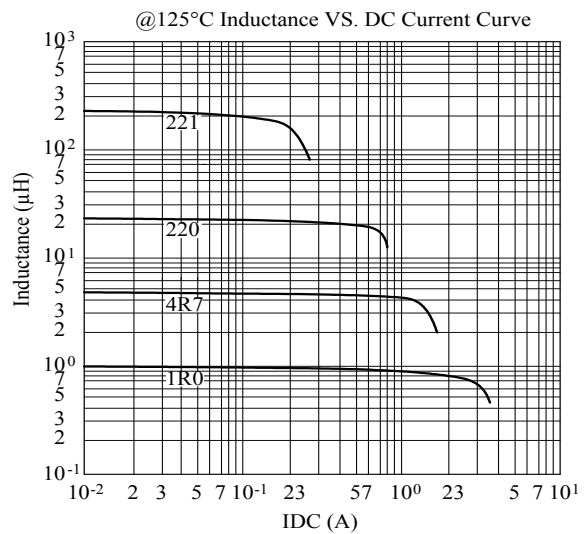
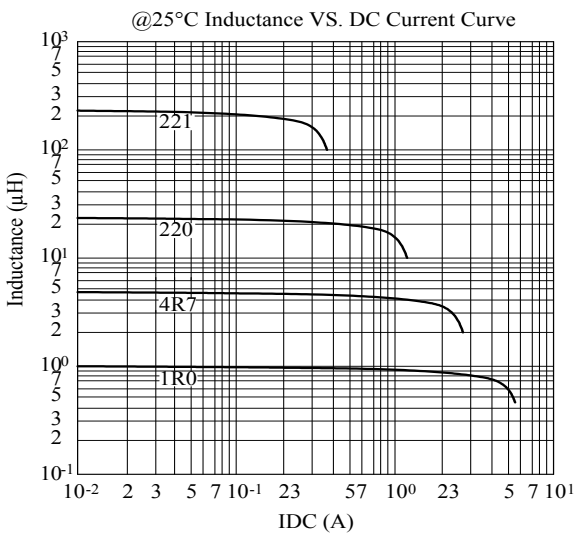


TPI4018CT-A1 Series

DWG. No.	Inductance (μH)	Test Freq.	Tolerance	SRF Min (MHz)	DC Resistance		Rated DC current (A)		Marking
					(mΩ)	Tol.	Idc1	Idc2	
TPI4018CT R82□-A1	0.82	100kHz,1V	N	100	16	±30%	4.20	4.00	R82
TPI4018CT 1R0□-A1	1.00	100kHz,1V	N	90	19		4.70	3.70	1R0
TPI4018CT 1R2□-A1	1.20	100kHz,1V	N	80	21		4.00	3.50	1R2
TPI4018CT 1R5□-A1	1.50	100kHz,1V	N	70	32		3.50	3.10	1R5
TPI4018CT 2R2□-A1	2.20	100kHz,1V	M	60	37		3.00	2.90	2R2
TPI4018CT 2R7□-A1	2.70	100kHz,1V	M	52	43	2.40	2.30	2R7	
TPI4018CT 3R3□-A1	3.30	100kHz,1V	M	45	55	2.30	2.20	3R3	
TPI4018CT 4R7□-A1	4.70	100kHz,1V	M	35	70	2.00	1.90	4R7	
TPI4018CT 6R8□-A1	6.80	100kHz,1V	M	30	98	1.60	1.50	6R8	
TPI4018CT 100□-A1	10.00	100kHz,1V	M	25	150	1.40	1.30	100	
TPI4018CT 150□-A1	15.00	100kHz,1V	M	18	220	1.10	1.00	150	
TPI4018CT 220□-A1	22.00	100kHz,1V	M	15	290	0.95	0.90	220	
TPI4018CT 330□-A1	33.00	100kHz,1V	M	12	460	0.75	0.70	330	
TPI4018CT 470□-A1	47.00	100kHz,1V	M	10	650	0.62	0.60	470	
TPI4018CT 680□-A1	68.00	100kHz,1V	M	8	940	0.50	0.50	680	
TPI4018CT 101□-A1	100.00	100kHz,1V	M	6	1330	0.45	0.42	101	
TPI4018CT 151□-A1	150.00	100kHz,1V	M	5	2000	0.35	0.32	151	
TPI4018CT 221□-A1	220.00	100kHz,1V	M	3	2960	0.30	0.28	221	

1. Inductance is measured in HP-4285A Precision LCR Meter.
 2. DCR is measured in DU-5011 milliohm meter (or equivalent).
 3. Tolerance : M=20% , N=30% (Table shows stock tolerances in □).
 4. Idc1 : Based on inductance change ($\Delta L/L_0 : \leq 30\%$)
 5. Idc2 : Based on temperature rise ($\Delta T : 40^\circ\text{C typ.}$)
 6. Operating temperature range: $-40^\circ\text{C} \sim +125^\circ\text{C}$ (Including self generated heat)
- Note: MSL = 1

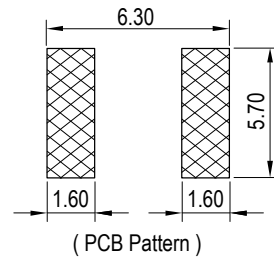
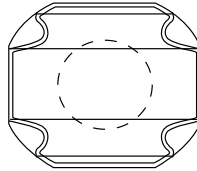
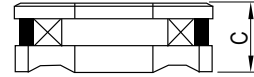
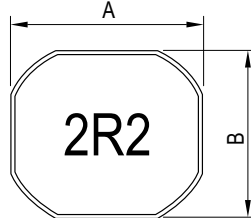
TPI4018CT-A1 Series



TPI
SERIES

TPI6045CT-A1

Semi-shielded



Unit: mm

Series	A	B	C
TPI6045CT-A1	6.00±0.20	6.00±0.20	4.50 max.

Features

- Magnetic resin coating onto coil
- Semi-shielded effect to reduce leakage field
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- Telematics
- Infotainment
- BCM

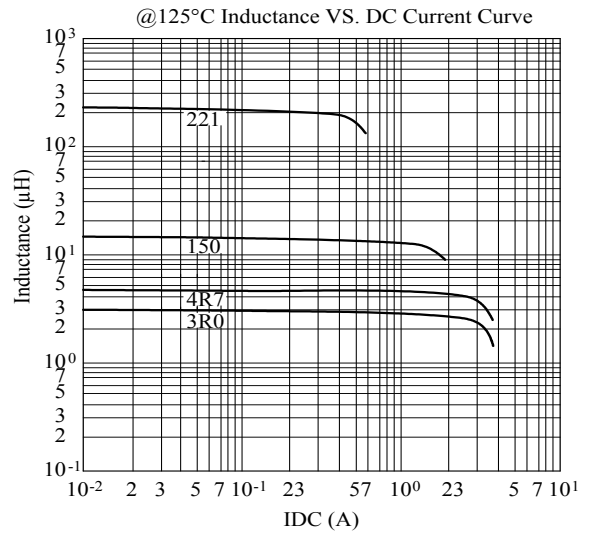
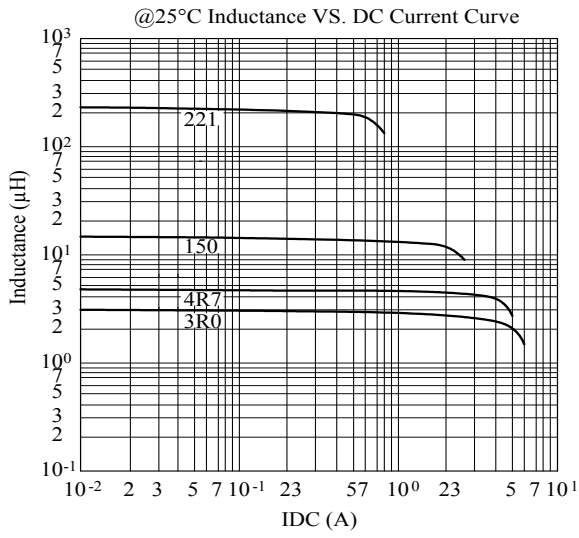


TPI6045CT-A1 Series

DWG. No.	Inductance (μ H)	Test Freq.	Tolerance	SRF Min (MHz)	DC Resistance		Rated DC current (A)		Marking
					(m Ω)	ToL.	Idc1	Idc2	
TPI6045CT 1R0□-A1	1.0	100kHz,1V	N	120	10	±30%	8.60	6.50	1R0
TPI6045CT 1R3□-A1	1.3	100kHz,1V	N	105	11		8.00	6.00	1R3
TPI6045CT 1R8□-A1	1.8	100kHz,1V	N	72	12		7.00	5.30	1R8
TPI6045CT 2R2□-A1	2.2	100kHz,1V	N	45	13		6.10	5.00	2R2
TPI6045CT 3R0□-A1	3.0	100kHz,1V	N	40	17		5.00	4.80	3R0
TPI6045CT 3R3□-A1	3.3	100kHz,1V	N	32	17		4.50	4.50	3R3
TPI6045CT 3R6□-A1	3.6	100kHz,1V	N	31	17		4.90	4.50	3R6
TPI6045CT 4R5□-A1	4.5	100kHz,1V	N	30	23		4.30	3.80	4R5
TPI6045CT 4R7□-A1	4.7	100kHz,1V	N	29	23		4.00	3.70	4R7
TPI6045CT 5R6□-A1	5.6	100kHz,1V	N	25	26		3.80	3.60	5R6
TPI6045CT 6R3□-A1	6.3	100kHz,1V	N	27	26		3.80	3.60	6R3
TPI6045CT 6R8□-A1	6.8	100kHz,1V	N	25	34		3.60	3.50	6R8
TPI6045CT 8R2□-A1	8.2	100kHz,1V	N	22	41		3.20	3.10	8R2
TPI6045CT 100□-A1	10.0	100kHz,1V	M	16	45		±20%	3.10	3.00
TPI6045CT 150□-A1	15.0	100kHz,1V	M	13	80	2.30		2.30	150
TPI6045CT 220□-A1	22.0	100kHz,1V	M	11	112	1.90		1.90	220
TPI6045CT 330□-A1	33.0	100kHz,1V	M	8	170	1.50		1.50	330
TPI6045CT 470□-A1	47.0	100kHz,1V	M	7	210	1.30		1.30	470
TPI6045CT 560□-A1	56.0	100kHz,1V	M	6	270	1.20		1.20	560
TPI6045CT 680□-A1	68.0	100kHz,1V	M	5	325	1.00		1.00	680
TPI6045CT 101□-A1	100.0	100kHz,1V	M	4	460	0.90		0.90	101
TPI6045CT 221□-A1	220.0	100kHz,1V	M	3	920	0.55		0.50	221
TPI6045CT 331□-A1	330.0	100kHz,1V	M	2	1450	0.45		0.40	331

1. Inductance is measured in HP-4285A Precision LCR Meter.
 2. DCR is measured in DU-5011 milliohm meter (or equivalent).
 3. Tolerance : M=20% , N=30% (Table shows stock tolerances in □).
 4. Idc1 : Based on inductance change ($\Delta L/L_0$: \leq -30%)
 5. Idc2 : Based on temperature rise (ΔT : 40°C typ.)
 6. Operating Temperature: -40°C ~ +125°C
- Note: MSL = 1

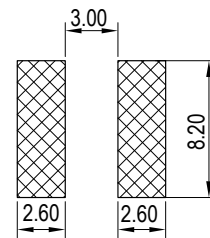
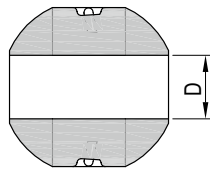
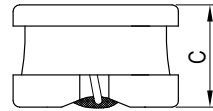
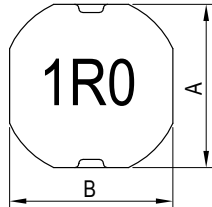
TPI6045CT-A1 Series



MRN
SERIES

8040

Semi-shielded



(PCB Pattern)

Unit: mm

Series	A	B	C	D
MRN8040	8.15±0.30	7.90±0.30	4.20 max.	3.20 ref.

Features

- Magnetic resin coating onto coil
- Semi-shielded effect to reduce leakage field
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- Telematics
- Infotainment
- BCM

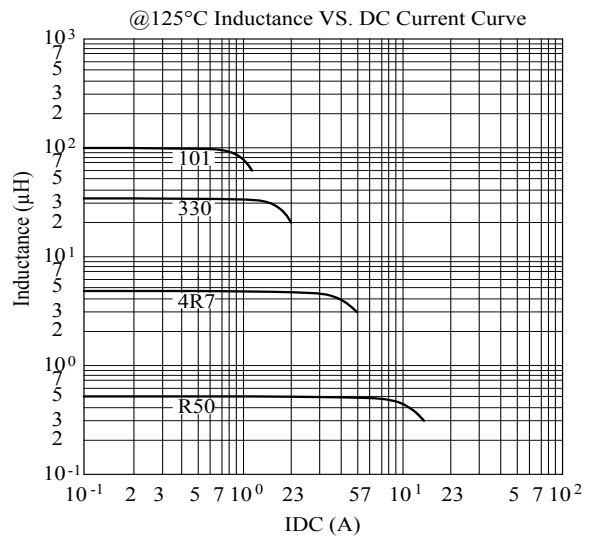
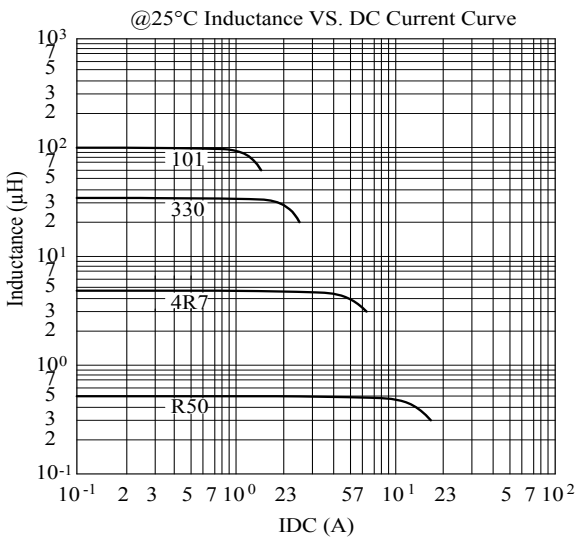


MRN8040 Series

DWG. No.	Inductance (μH)	Q min. @1 MHz	RDC (mΩ)		SRF (MHz) typ.	Isat (A) typ.	I _{rms} (A) typ.
			typ.	max.			
MRN8040R50YHB-□□□	0.5±30%	15	5.0	7.0	110	15.0	10.0
MRN80401R0MHB-□□□	1.0±20%	15	6.9	10.0	85	13.8	8.5
MRN80401R5MHB-□□□	1.5±20%	15	8.0	11.0	55	12.0	7.0
MRN80402R2MHB-□□□	2.2±20%	14	11.0	14.0	43	10.5	6.3
MRN80402R7MHB-□□□	2.7±20%	14	16.0	21.0	37	9.0	5.6
MRN80403R6MHB-□□□	3.6±20%	13	18.0	24.0	34	8.0	4.9
MRN80404R7MHB-□□□	4.7±20%	13	24.0	30.0	29	7.0	4.1
MRN80406R8MHB-□□□	6.8±20%	12	33.0	42.0	23	5.5	3.9
MRN80408R2MHB-□□□	8.2±20%	11	37.0	48.0	22	5.2	3.7
MRN8040100MHB-□□□	10.0±20%	11	47.0	61.0	20	4.8	3.1
MRN8040150MHB-□□□	15.0±20%	10	66.0	86.0	15	3.7	2.4
MRN8040220MHB-□□□	22.0±20%	10	92.0	120.0	12	3.3	2.2
MRN8040330MHB-□□□	33.0±20%	8.5	133.0	166.0	10	2.6	1.7
MRN8040470MHB-□□□	47.0±20%	8.5	190.0	237.0	8.5	2.2	1.4
MRN8040680MHB-□□□	68.0±20%	8.0	268.0	337.0	7.0	1.7	1.1
MRN8040101MHB-□□□	100.0±20%	8.0	383.0	479.0	6.0	1.3	1.0

1. Electrical specifications at 25°C
2. Inductance test condition.: 100kHz / 1V
3. Isat base on ΔL/LOA=30% typ.
4. I_{rms} base on temp. rise 40°C typ.

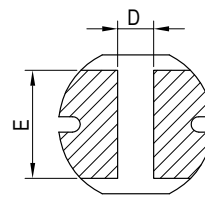
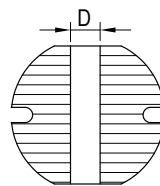
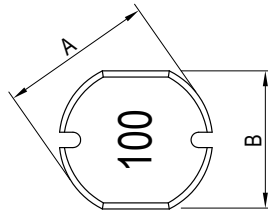
MRN8040 Series



AER
SERIES

0403 / 0604 / 0805 / MER1006

Non-Shielded



MER1006

For PCB pattern information, please see page 38

Unit: mm

Series	A	B	C	D	E
AER0403	4.50±0.30	4.00±0.30	3.20±0.30	1.60 ref.	-
AER0604	5.80±0.30	5.20±0.30	4.50±0.30	2.10±0.50	-
AER0805	7.80±0.30	7.00±0.30	5.00±0.50	2.10 ref.	-
MER1006	10.00±0.40	9.00±0.40	5.40±0.40	3.00 ref.	7.00 ref.

Features

- Open magnetic circuit structure
- Low DCR
- Excellent current handling
- High saturation current ratings
- AEC-Q200 Grade 1: AER0403 / AER0604 / AER0805
- AER0403: Operating temp.: -40°C ~ +150°C (including self-temperature rise)
- AER0604 / AER0805: Operating temp.: -40°C ~ +125°C (including self-temperature rise)
- AEC-Q200 Grade 0: MER1006
- MER1006: Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- ADAS
- HVAC
- Infotainment



AER0403 Series						
DWG. No.	Inductance (μ H)	RDC (m Ω)		SRF (MHz) ref.	Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.			
AER04031R0MLB-□□□	1.0 \pm 20%	19.3	48	113	4.80	2.70
AER04032R2MLB-□□□	2.2 \pm 20%	31.8	71	76	3.30	2.30
AER04033R3MLB-□□□	3.3 \pm 20%	46.9	86	64	2.50	2.00
AER04034R7MLB-□□□	4.7 \pm 20%	64.5	108	50	2.20	1.65
AER04036R8MLB-□□□	6.8 \pm 20%	93.6	126	41	1.70	1.45
AER04038R2MLB-□□□	8.2 \pm 20%	106.0	142	38	1.60	1.40
AER0403100MLB-□□□	10.0 \pm 20%	127.0	172	36	1.40	1.05
AER0403120MLB-□□□	12.0 \pm 20%	146.0	197	32	1.30	1.00
AER0403150MLB-□□□	15.0 \pm 20%	192.0	259	29	1.20	0.85
AER0403180MLB-□□□	18.0 \pm 20%	237.0	309	28	1.10	0.75
AER0403220MLB-□□□	22.0 \pm 20%	270.0	351	25	0.95	0.70
AER0403270MLB-□□□	27.0 \pm 20%	322.0	419	22	0.85	0.65
AER0403330KLB-□□□	33.0 \pm 10%	373.0	485	20	0.80	0.60
AER0403390KLB-□□□	39.0 \pm 10%	449.0	561	18	0.70	0.55
AER0403470KLB-□□□	47.0 \pm 10%	505.0	631	16	0.65	0.50
AER0403560KLB-□□□	56.0 \pm 10%	736.0	920	15	0.60	0.45
AER0403680KLB-□□□	68.0 \pm 10%	822.0	1028	13	0.55	0.40

1. Electrical specifications at 25°C
2. Inductance test condition : 1MHz/1V
3. Rated current: The DC current at which the inductance decreases to 90% of its initial value or when $\Delta t=40^{\circ}\text{C}$, whichever is lower ($T_a=20^{\circ}\text{C}$)

AER0604 Series						
DWG. No.	Inductance (μ H)	RDC (m Ω)		SRF (MHz) ref.	Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.			
AER06041R2MLB-□□□	1.2 \pm 20%	16.0	20.0	155.0	6.00	5.30
AER06041R5MLB-□□□	1.5 \pm 20%	18.5	24.0	123.0	5.30	5.00
AER06042R2MLB-□□□	2.2 \pm 20%	22.9	31.0	80.0	4.20	4.35
AER06042R7MLB-□□□	2.7 \pm 20%	27.8	55.0	60.0	3.80	4.00
AER06043R3MLB-□□□	3.3 \pm 20%	29.9	60.0	50.0	3.50	3.80
AER06043R9MLB-□□□	3.9 \pm 20%	34.0	65.0	44.0	3.20	3.60
AER06044R7MLB-□□□	4.7 \pm 20%	38.2	70.0	47.0	3.00	3.40
AER06045R6MLB-□□□	5.6 \pm 20%	41.9	75.0	41.0	2.75	3.20
AER06046R8MLB-□□□	6.8 \pm 20%	46.7	80.0	36.0	2.40	3.00
AER06048R2MLB-□□□	8.2 \pm 20%	53.7	90.0	31.0	2.20	2.80
AER0604100MLB-□□□	10.0 \pm 20%	62.1	100.0	32.0	2.00	2.60
AER0604120MLB-□□□	12.0 \pm 20%	67.5	120.0	29.0	1.85	2.50
AER0604150MLB-□□□	15.0 \pm 20%	94.7	140.0	26.0	1.65	2.30
AER0604180MLB-□□□	18.0 \pm 20%	114.0	150.0	24.0	1.50	2.00
AER0604220MLB-□□□	22.0 \pm 20%	128.0	180.0	19.0	1.35	1.80
AER0604270MLB-□□□	27.0 \pm 20%	140.0	200.0	18.0	1.20	1.70
AER0604330MLB-□□□	33.0 \pm 20%	184.0	230.0	17.0	1.10	1.55
AER0604390MLB-□□□	39.0 \pm 20%	215.0	320.0	17.0	1.00	1.40
AER0604470MLB-□□□	47.0 \pm 20%	258.0	370.0	14.0	0.90	1.25
AER0604560KLB-□□□	56.0 \pm 10%	298.0	420.0	12.0	0.82	1.10
AER0604680KLB-□□□	68.0 \pm 10%	343.0	460.0	11.0	0.74	1.00
AER0604820KLB-□□□	82.0 \pm 10%	436.0	600.0	8.0	0.68	0.90
AER0604101KLB-□□□	100.0 \pm 10%	559.0	700.0	7.5	0.62	0.80
AER0604121KLB-□□□	120.0 \pm 10%	599.0	900.0	7.5	0.60	0.75
AER0604151KLB-□□□	150.0 \pm 10%	900.0	1100.0	7.0	0.52	0.52
AER0604181KLB-□□□	180.0 \pm 10%	1030.0	1380.0	6.0	0.50	0.50
AER0604221KLB-□□□	220.0 \pm 10%	1325.0	1570.0	5.0	0.47	0.47

1. Electrical specifications at 25°C
2. Inductance test condition : 1.2 μ H~82 μ H at 1MHz/1V
100 μ H~220 μ H at 1kHz/1V
3. Rated current: The DC current at which the inductance decreases to 90% of it's initial value or when $\Delta t=40^{\circ}$ C, whichever is lower($T_a=20^{\circ}$ C)

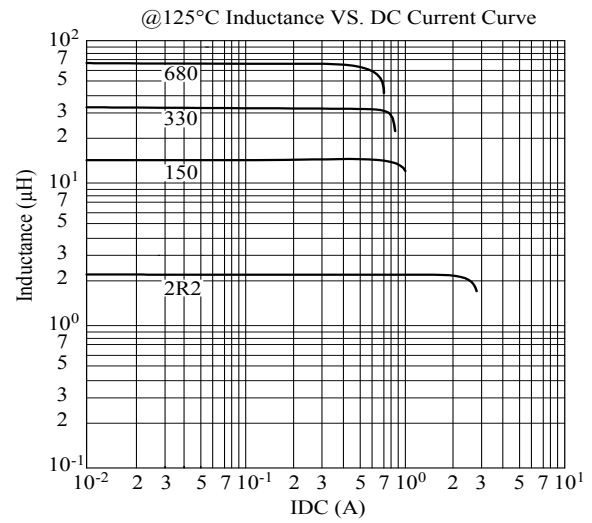
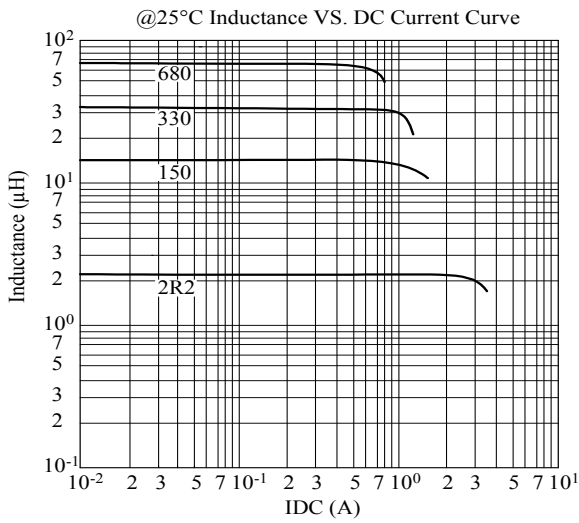
AER0805 Series						
DWG. No.	Inductance (μ H)	RDC (m Ω)		SRF (MHz) ref.	Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.			
AER08051R5MLB-□□□	1.5 \pm 20%	15	20	115.0	6.50	5.80
AER08052R5MLB-□□□	2.5 \pm 20%	20	27	71.2	5.00	5.00
AER08053R3MLB-□□□	3.3 \pm 20%	24	32	53.3	4.50	4.60
AER08054R7MLB-□□□	4.7 \pm 20%	28	38	44.2	4.00	4.30
AER08055R6MLB-□□□	5.6 \pm 20%	32	43	34.9	3.70	4.00
AER08056R8MLB-□□□	6.8 \pm 20%	36	48	32.0	3.20	3.80
AER08058R2MLB-□□□	8.2 \pm 20%	39	52	28.5	3.00	3.60
AER0805100MLB-□□□	10.0 \pm 20%	50	70	27.5	2.60	3.20
AER0805120MLB-□□□	12.0 \pm 20%	56	80	25.8	2.40	3.00
AER0805150MLB-□□□	15.0 \pm 20%	60	90	22.5	2.20	2.50
AER0805180MLB-□□□	18.0 \pm 20%	74	100	17.6	2.00	2.45
AER0805220MLB-□□□	22.0 \pm 20%	82	110	16.5	1.80	2.35
AER0805270MLB-□□□	27.0 \pm 20%	94	120	14.3	1.70	2.20
AER0805330MLB-□□□	33.0 \pm 20%	117	130	13.2	1.60	2.00
AER0805390MLB-□□□	39.0 \pm 20%	137	160	12.6	1.50	1.90
AER0805470KLB-□□□	47.0 \pm 10%	165	180	12.1	1.40	1.70
AER0805560KLB-□□□	56.0 \pm 10%	200	240	11.5	1.20	1.60
AER0805680KLB-□□□	68.0 \pm 10%	230	280	10.5	1.10	1.45
AER0805820KLB-□□□	82.0 \pm 10%	300	370	9.4	1.00	1.20
AER0805101KLB-□□□	100.0 \pm 10%	320	430	8.8	0.90	1.10
AER0805121KLB-□□□	120.0 \pm 10%	360	470	7.7	0.80	1.00
AER0805151KLB-□□□	150.0 \pm 10%	515	640	7.2	0.72	0.90
AER0805181KLB-□□□	180.0 \pm 10%	576	710	6.2	0.65	0.85
AER0805221KLB-□□□	220.0 \pm 10%	750	960	6.0	0.60	0.80
AER0805271KLB-□□□	270.0 \pm 10%	870	1110	5.0	0.55	0.70
AER0805331KLB-□□□	330.0 \pm 10%	1020	1200	4.9	0.50	0.65
AER0805391KLB-□□□	390.0 \pm 10%	1290	1500	4.4	0.45	0.60
AER0805471KLB-□□□	470.0 \pm 10%	1470	1700	3.6	0.40	0.55

1. Electrical specifications at 25°C
2. Inductance test condition : 1.5 μ H~82 μ H at 1MHz/1V
100 μ H~470 μ H at 1kHz/1V
3. Rated current: The DC current at which the inductance decreases to 90% of its initial value or when $\Delta t=40^{\circ}\text{C}$, whichever is lower($T_a=20^{\circ}\text{C}$)

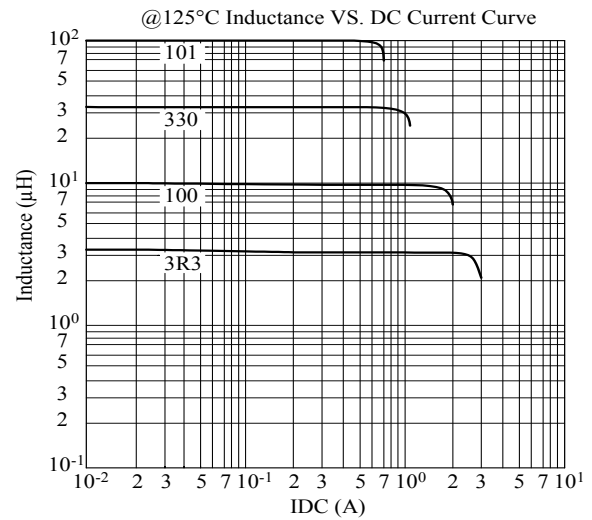
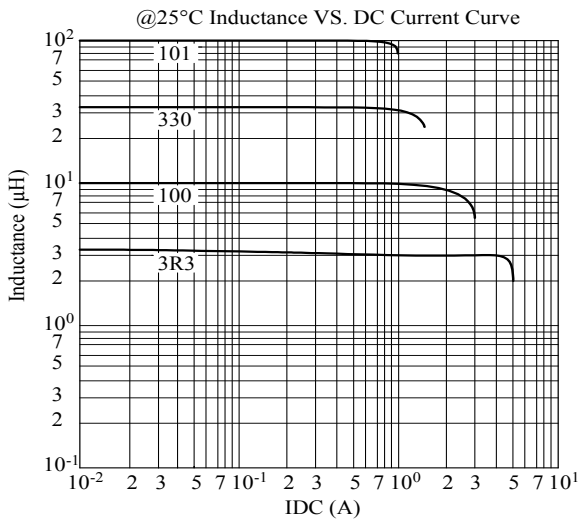
MER1006 Series						
DWG. No.	Inductance (μH)	RDC (m Ω)		SRF (MHz) ref.	Isat (A) typ.	I _{rms} (A) max.
		typ.	max.			
MER10061R8MLB-□□□	1.8±20%	10.8	18	69.6	7.70	7.20
MER10062R2MLB-□□□	2.2±20%	14.3	21	57.7	6.40	6.00
MER10063R3MLB-□□□	3.3±20%	16.6	24	48.8	5.70	5.40
MER10063R9MLB-□□□	3.9±20%	18.8	27	40.6	5.50	5.20
MER10064R7MLB-□□□	4.7±20%	23.3	36	37.4	5.00	4.70
MER10065R6MLB-□□□	5.6±20%	25.9	40	35.6	4.80	4.50
MER10066R8MLB-□□□	6.8±20%	28.1	44	32.1	4.50	4.20
MER10068R2MLB-□□□	8.2±20%	32.3	48	27.9	4.30	4.10
MER1006100MLB-□□□	10±20%	34.2	60	25.0	4.10	3.80
MER1006120MLB-□□□	12±20%	36.9	70	23.0	3.85	3.60
MER1006150MLB-□□□	15±20%	43.6	80	19.8	3.64	3.40
MER1006180MLB-□□□	18±20%	60.7	90	19.3	3.00	2.80
MER1006220MLB-□□□	22±20%	68.3	100	16.0	2.75	2.60
MER1006270MLB-□□□	27±20%	87.6	110	13.3	2.45	2.30
MER1006330MLB-□□□	33±20%	96.9	120	12.1	2.35	2.20
MER1006390MLB-□□□	39±20%	111	140	12.0	2.00	1.90
MER1006470KLB-□□□	47±10%	126	170	11.0	1.90	1.80
MER1006560KLB-□□□	56±10%	141	190	10.2	1.80	1.70
MER1006680KLB-□□□	68±10%	176	220	9.4	1.70	1.60
MER1006820KLB-□□□	82±10%	201	250	8.8	1.60	1.50
MER1006101KLB-□□□	100±10%	262	350	7.3	1.35	1.30
MER1006121KLB-□□□	120±10%	301	400	6.6	1.25	1.20
MER1006151KLB-□□□	150±10%	350	470	6.6	1.15	1.10
MER1006181KLB-□□□	180±10%	457	630	6.1	1.10	1.00
MER1006221KLB-□□□	220±10%	524	730	5.3	0.95	0.90
MER1006271KLB-□□□	270±10%	711	970	4.3	0.85	0.80
MER1006331KLB-□□□	330±10%	814	1150	4.3	0.75	0.70
MER1006391KLB-□□□	390±10%	923	1300	3.3	0.70	0.65
MER1006471KLB-□□□	470±10%	1056	1480	3.3	0.64	0.60
MER1006561KLB-□□□	560±10%	1359	1900	3.3	0.59	0.55
MER1006681KLB-□□□	680±10%	1559	2250	2.8	0.54	0.50
MER1006821KLB-□□□	820±10%	1805	2550	2.2	0.48	0.45

1. Electrical specifications at 25°C
2. Inductance test condition : 1.8 μH ~82 μH at 1MHz/1V
100 μH ~820 μH at 1kHz/1V
3. Isat base on $\Delta\text{L}/\text{LOA}$ =10% typ.
4. I_{rms} base on temp. rise 40°C max.

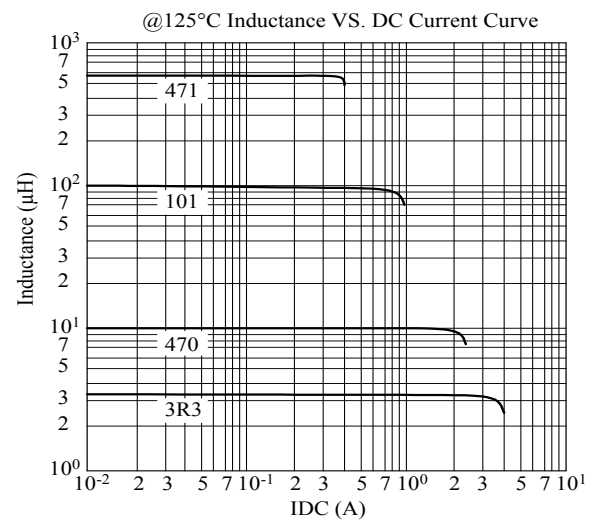
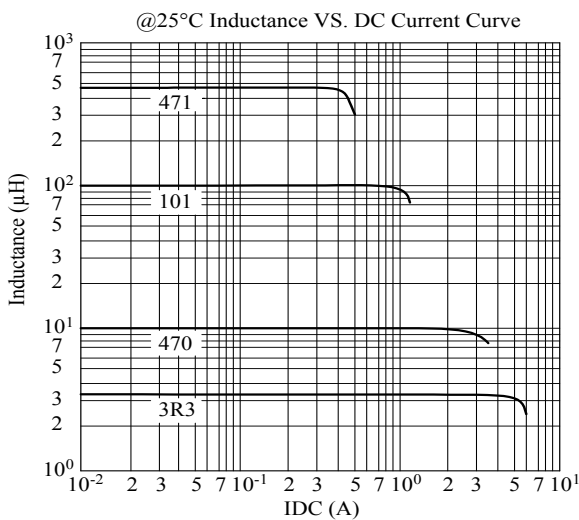
AER0403 Series



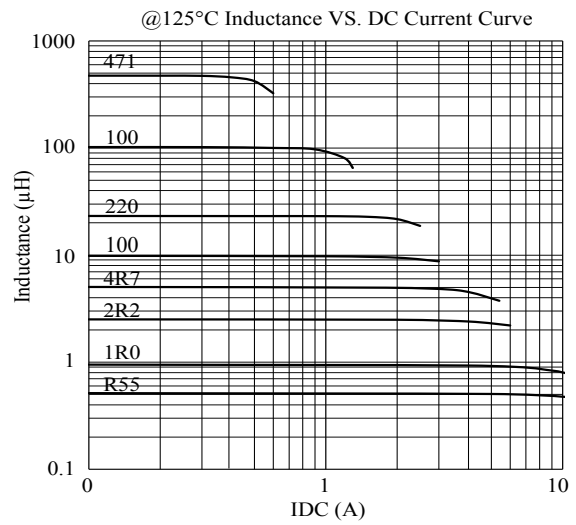
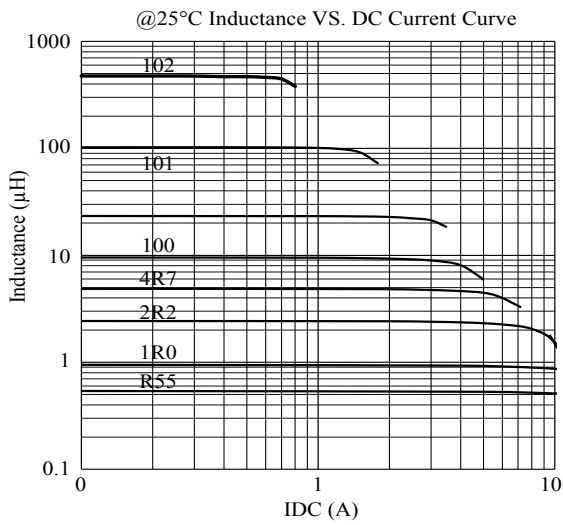
AER0604 Series



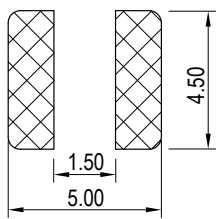
AER0805 Series



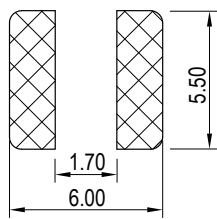
MER1006 Series



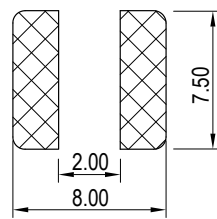
PCB Pattern



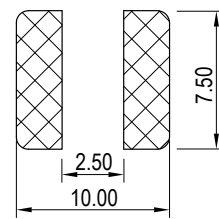
AER0403



AER0604



AER0805

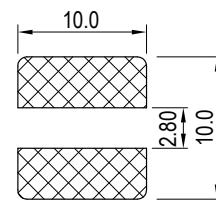
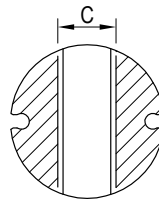
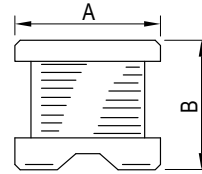
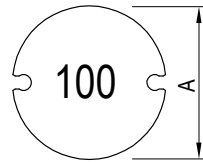


MER1006

ASR
SERIES

1011

Non-Shielded



(PCB Pattern)

Unit: mm

Series	A	B	C
ASR1011	9.50±0.30	11.50±0.50	2.90 ref.

Features

- Open magnetic circuit structure
- Low DCR
- Excellent current handling
- High saturation current ratings
- High energy storage
- Rugged, cost-effective power inductors
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- ADAS
- HVAC
- Infotainment



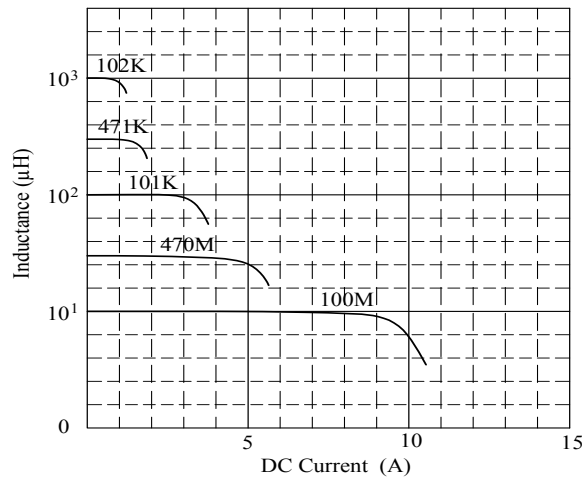
ASR1011 Series

DWG. No.	Inductance (μH)	SRF (MHz) typ.	RDC (Ω) max.	I _{rms} 1 (A) typ.	I _{rms} 2 (A) max.	I _{sat} (A) max.
ASR1011100MLB-□□□	10.0±20%	18.0	0.035	3.50	5.00	8.00
ASR1011150MLB-□□□	15.0±20%	13.0	0.045	3.00	4.00	7.00
ASR1011220MLB-□□□	22.0±20%	12.0	0.065	2.50	3.20	5.50
ASR1011330MLB-□□□	33.0±20%	9.5	0.080	2.00	2.60	4.00
ASR1011470MLB-□□□	47.0±20%	7.0	0.110	1.70	2.20	3.80
ASR1011680MLB-□□□	68.0±20%	5.8	0.150	1.50	2.00	3.00
ASR1011101KLB-□□□	100.0±10%	4.8	0.200	1.30	1.80	2.50
ASR1011151KLB-□□□	150.0±10%	3.8	0.320	1.00	1.50	2.00
ASR1011221KLB-□□□	220.0±10%	3.1	0.420	0.90	1.20	1.70
ASR1011331KLB-□□□	330.0±10%	2.5	0.700	0.70	0.90	1.30
ASR1011471KLB-□□□	470.0±10%	2.1	0.900	0.50	0.75	1.10
ASR1011681KLB-□□□	680.0±10%	1.7	1.250	0.40	0.60	1.00
ASR1011102KLB-□□□	1000.0±10%	1.4	1.900	0.30	0.50	0.80

1. Electrical specifications at 25°C
2. Test Freq:100kHz , 0.1V
3. I_{sat} base on ΔL/LOA=10% max.
4. I_{rms} 1 base on temp. rise 20°C typ.
5. I_{rms} 2 base on temp. rise 40°C max.

ASR1011 Series

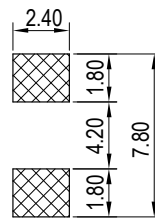
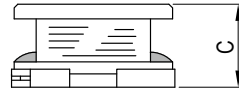
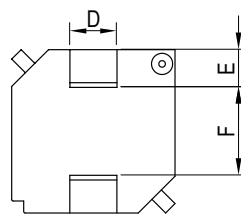
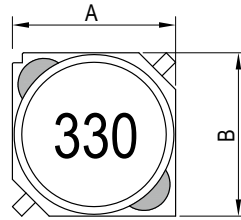
@ Inductance VS. DC superposition characteristics



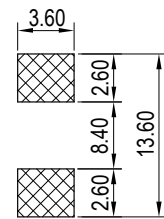
ASB
SERIES

7030 / 7045 / 1305

Non-Shielded



ASB7030 / ASB7045



ASB1305

(PCB Pattern)

Unit: mm

Series	A	B	C	D	E	F
ASB7030	7.00±0.30	7.00±0.30	3.00±0.30	2.00 typ.	1.50 typ.	4.00 typ.
ASB7045	7.00±0.30	7.00±0.30	4.50±0.30	2.00 TYP.	1.50 TYP.	4.00 typ.
ASB1305	12.70±0.30	12.70±0.30	4.80±0.30	3.00 typ.	2.00 typ.	8.60 typ.

Features

- Open magnetic circuit structure
- Low DCR values
- High saturation current ratings
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- ADAS
- HVAC
- Infotainment



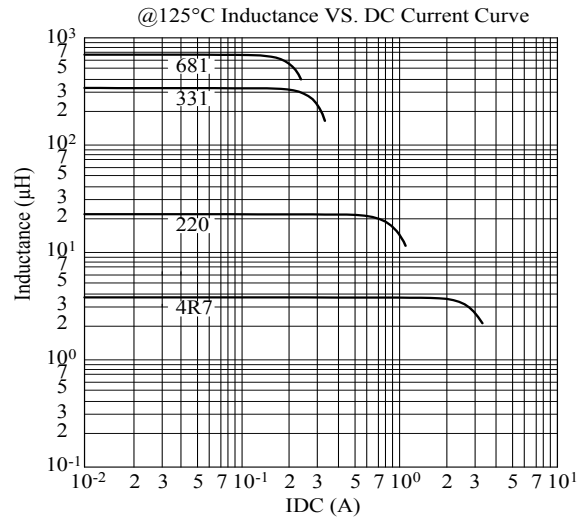
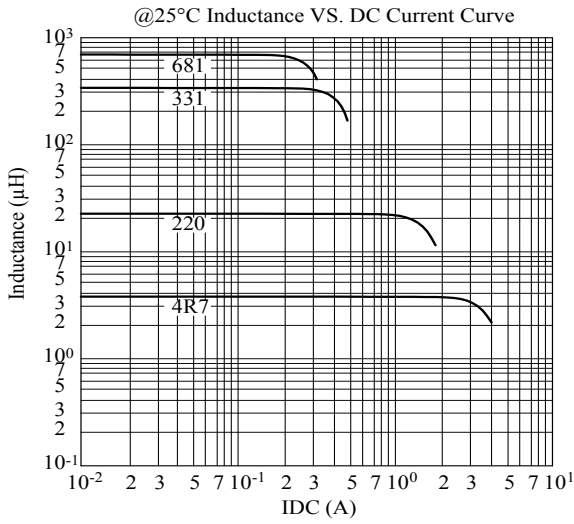
ASB7030 Series							
DWG. No.	Inductance (μ H) 100kHz / 0.1V	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (Ω) max.	Irms (A) max.	Isat (A) typ.
ASB70301R0MLB-□□□	1.0 \pm 20%	18	7.96	113	0.022	3.00	4.30
ASB70301R5MLB-□□□	1.5 \pm 20%	17	7.96	100	0.027	2.75	3.60
ASB70302R2MLB-□□□	2.2 \pm 20%	17	7.96	80	0.030	2.60	3.20
ASB70303R5MLB-□□□	3.5 \pm 20%	17	7.96	59	0.038	2.20	2.60
ASB70304R7MLB-□□□	4.7 \pm 20%	14	7.96	43	0.048	1.85	2.25
ASB70306R2MLB-□□□	6.2 \pm 20%	17	7.96	41	0.058	1.65	2.00
ASB7030100MLB-□□□	10.0 \pm 20%	16	2.52	35	0.075	1.50	1.60
ASB7030150MLB-□□□	15.0 \pm 20%	14	2.52	33	0.115	1.20	1.30
ASB7030220MLB-□□□	22.0 \pm 20%	14	2.52	32	0.160	1.02	1.10
ASB7030330MLB-□□□	33.0 \pm 20%	13	2.52	24	0.230	0.85	0.90
ASB7030470KLB-□□□	47.0 \pm 10%	12	2.52	18	0.340	0.70	0.78
ASB7030680KLB-□□□	68.0 \pm 10%	12	2.52	16	0.480	0.58	0.64
ASB7030101KLB-□□□	100.0 \pm 10%	18	0.796	15	0.720	0.46	0.52
ASB7030151KLB-□□□	150.0 \pm 10%	18	0.796	12	0.920	0.40	0.42
ASB7030221KLB-□□□	220.0 \pm 10%	23	0.796	9	1.600	0.32	0.34
ASB7030331KLB-□□□	330.0 \pm 10%	24	0.796	7	2.200	0.26	0.28
ASB7030471KLB-□□□	470.0 \pm 10%	30	0.796	6	2.800	0.22	0.23
ASB7030681KLB-□□□	680.0 \pm 10%	28	0.796	5	4.350	0.18	0.18
ASB7045 Series							
DWG. No.	Inductance (μ H) 100kHz / 0.1V	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (Ω) max.	Irms (A) max.	Isat (A) typ.
ASB70451R2MLB-□□□	1.2 \pm 20%	25	7.96	90	0.022	3.80	5.00
ASB70451R5MLB-□□□	1.5 \pm 20%	26	7.96	109	0.027	3.50	4.50
ASB70452R2MLB-□□□	2.2 \pm 20%	24	7.96	79	0.032	3.30	4.00
ASB70453R3MLB-□□□	3.3 \pm 20%	23	7.96	47	0.036	2.80	3.70
ASB70454R7MLB-□□□	4.7 \pm 20%	23	7.96	38	0.042	2.60	3.40
ASB70456R8MLB-□□□	6.8 \pm 20%	22	7.96	35	0.054	2.25	2.70
ASB7045100MLB-□□□	10.0 \pm 20%	28	2.52	23	0.070	2.00	2.30
ASB7045150MLB-□□□	15.0 \pm 20%	24	2.52	19	0.086	1.60	1.90
ASB7045220MLB-□□□	22.0 \pm 20%	26	2.52	18	0.125	1.40	1.62
ASB7045330MLB-□□□	33.0 \pm 20%	20	2.52	18	0.150	1.22	1.32
ASB7045470KLB-□□□	47.0 \pm 10%	21	2.52	11	0.230	1.00	1.10
ASB7045680KLB-□□□	68.0 \pm 10%	17	2.52	11	0.280	0.90	0.92
ASB7045101KLB-□□□	100.0 \pm 10%	17	0.796	10	0.430	0.75	0.72
ASB7045151KLB-□□□	150.0 \pm 10%	17	0.796	8	0.580	0.62	0.58
ASB7045221KLB-□□□	220.0 \pm 10%	22	0.796	6	0.930	0.50	0.48
ASB7045331KLB-□□□	330.0 \pm 10%	20	0.796	6	1.240	0.42	0.40
ASB7045471KLB-□□□	470.0 \pm 10%	20	0.796	4	1.850	0.34	0.30
ASB7045681KLB-□□□	680.0 \pm 10%	18	0.796	4	2.400	0.30	0.26
ASB7045102KLB-□□□	1000.0 \pm 10%	48	0.252	3	4.000	0.22	0.20

1. Electrical specifications at 25°C
2. Irms base on temperature rise 40°C max.
3. Isat base on Δ L/LOA=10% typ .

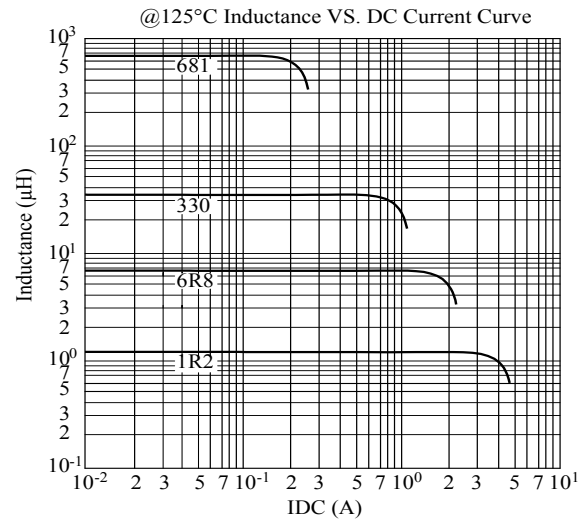
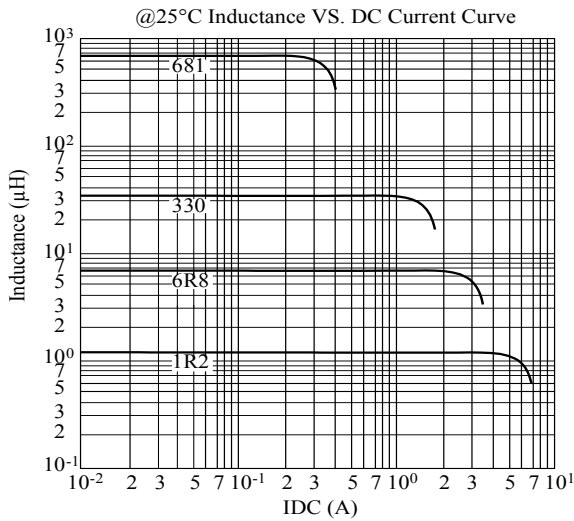
ASB1305 Series								
DWG. No.	L (μ H)	Q ref.	Test Freq.		SRF (MHz) typ.	RDC (m Ω) max.	I _{rms} (A)	I _{sat} (A)
			L (Hz)	Q (MHz)				
ASB13052R5YLB-□□□	2.5 \pm 25%	20	100k/10mV	7.96	61.0	14	7.20	8.00
ASB13053R5YLB-□□□	3.5 \pm 25%	18	100k/10mV	7.96	43.0	16	6.00	7.00
ASB13054R6YLB-□□□	4.6 \pm 25%	20	100k/10mV	7.96	35.0	18	5.20	6.00
ASB13056R8YLB-□□□	6.8 \pm 25%	18	100k/10mV	7.96	32.0	24	4.30	5.20
ASB1305100MLB-□□□	10.0 \pm 20%	25	100k/10mV	2.52	27.0	37	3.60	4.40
ASB1305150MLB-□□□	15.0 \pm 20%	25	100k/10mV	2.52	24.0	46	3.30	3.70
ASB1305220MLB-□□□	22.0 \pm 20%	26	100k/10mV	2.52	20.0	62	2.90	3.00
ASB1305330MLB-□□□	33.0 \pm 20%	22	100k/10mV	2.52	16.0	85	2.50	2.60
ASB1305470MLB-□□□	47.0 \pm 20%	20	100k/10mV	2.52	13.0	130	1.90	2.00
ASB1305680MLB-□□□	68.0 \pm 20%	20	100k/10mV	2.52	11.0	165	1.65	1.80
ASB1305101KLB-□□□	100.0 \pm 10%	18	100k/10mV	0.796	11.0	255	1.40	1.40
ASB1305151KLB-□□□	150.0 \pm 10%	15	100k/10mV	0.796	8.0	380	1.20	1.15
ASB1305221KLB-□□□	220.0 \pm 10%	15	100k/10mV	0.796	7.0	500	1.00	0.95
ASB1305331KLB-□□□	330.0 \pm 10%	10	100k/10mV	0.796	6.0	700	0.85	0.80
ASB1305471KLB-□□□	470.0 \pm 10%	10	100k/10mV	0.796	4.0	1150	0.67	0.70
ASB1305681KLB-□□□	680.0 \pm 10%	10	100k/10mV	0.796	3.5	1400	0.60	0.58
ASB1305102KLB-□□□	1000.0 \pm 10%	32	100k/10mV	0.252	2.7	2350	0.46	0.47

1. Electrical specifications at 25°C
2. I_{rms} base on temperature rise 40°C max.
3. I_{sat} base on Δ L/LOA=25% typ .

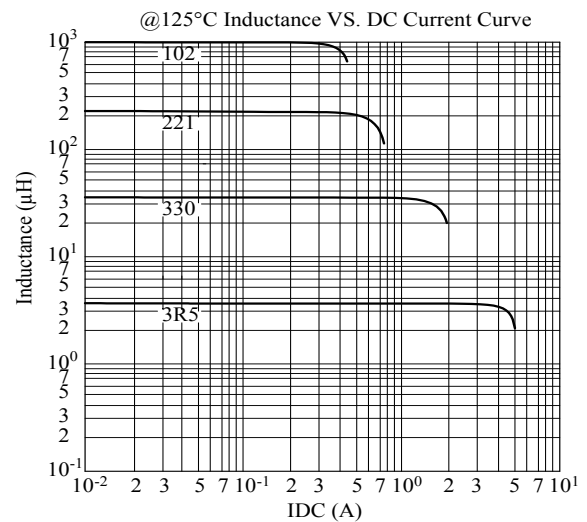
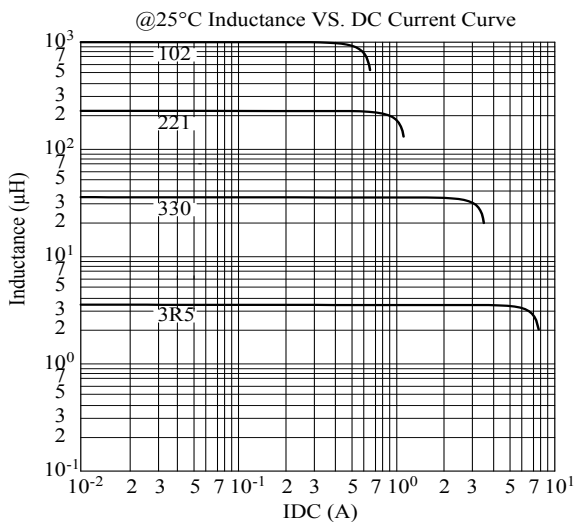
ASB7030 Series



ASB7045 Series



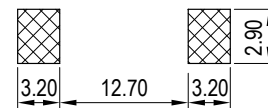
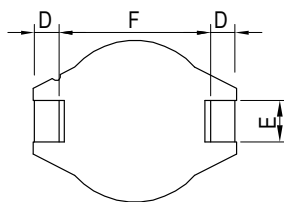
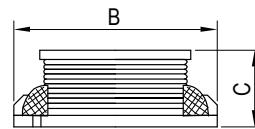
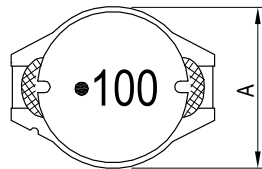
ASB1305 Series



ASB
SERIES

1806

Non-Shielded



(PCB Pattern)

Unit: mm

Series	A	B	C	D	E	F
ASB1806	14.00±0.50	18.20±0.50	6.60±0.50	2.50±0.20	2.60±0.20	13.00±0.30

Features

- Open magnetic circuit structure
- Low DCR values
- High saturation current ratings
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- ADAS
- HVAC
- Infotainment

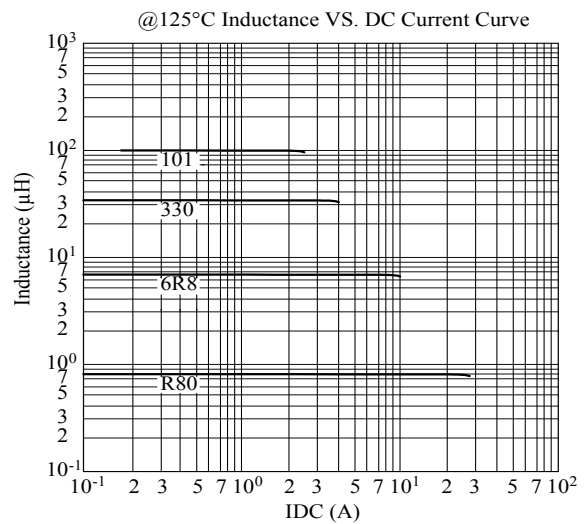
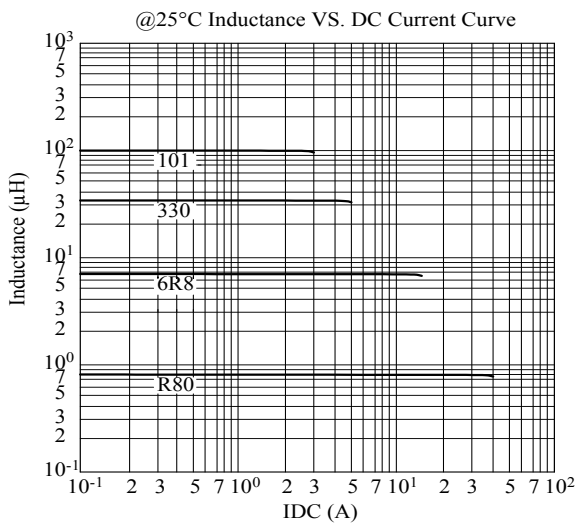


ASB1806 Series

DWG. No.	Inductance (μH)	SRF (MHz) typ.	RDC (mΩ) max.	I _{rms} (A)	I _{sat} (A)
ASB18061R0MLB-□□□	1.0±20%	100.0	4.0	10.00	30.00
ASB18062R2MLB-□□□	2.2±20%	55.0	6.8	9.00	22.00
ASB18063R3MLB-□□□	3.3±20%	40.0	9.8	7.60	17.00
ASB18065R6MLB-□□□	5.6±20%	30.0	15.0	6.40	12.80
ASB1806100MLB-□□□	10.0±20%	25.0	25.0	5.30	10.00
ASB1806150MLB-□□□	15.0±20%	17.0	35.0	4.30	8.00
ASB1806220MLB-□□□	22.0±20%	13.0	45.0	3.60	6.70
ASB1806330MLB-□□□	33.0±20%	11.0	68.0	3.00	5.40
ASB1806470MLB-□□□	47.0±20%	9.0	95.0	2.50	4.60
ASB1806680MLB-□□□	68.0±20%	8.0	130.0	2.10	3.80
ASB1806101KLB-□□□	100.0±10%	7.0	190.0	1.70	3.20
ASB1806151KLB-□□□	150.0±10%	5.0	270.0	1.40	2.60
ASB1806221KLB-□□□	220.0±10%	4.5	420.0	1.10	2.20
ASB1806331KLB-□□□	330.0±10%	3.5	580.0	1.00	1.80
ASB1806471KLB-□□□	470.0±10%	3.0	820.0	0.80	1.50
ASB1806681KLB-□□□	680.0±10%	2.5	1200.0	0.70	1.20
ASB1806102KLB-□□□	1000.0±10%	2.0	1800.0	0.50	1.00

1. Electrical specifications at 25°C
2. Inductance Test Freq. at 100kHz / 0.1V
3. I_{rms} base on temperature rise 40°C max.
4. I_{sat} base on ΔL/L0A=10% typ .

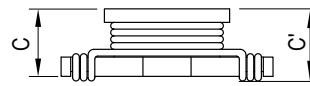
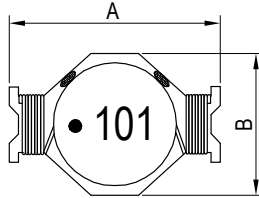
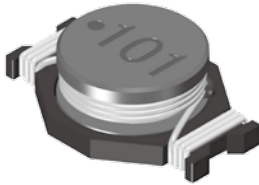
ASB1806 Series



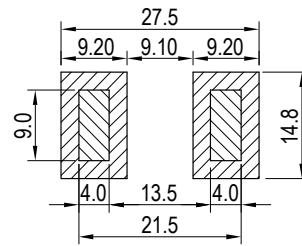
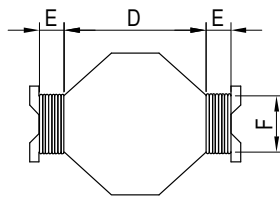
ASB
SERIES

2207

Non-Shielded



C:
7.4 Max. (5R6~101)
7.6 Max. (2R7~4R7)
7.7 Max. (R80~1R8)



(PCB Pattern)

Unit: mm

Series	A	B	C	D	E	F
ASB2207	22.00±0.30	15.00±0.30	7.00±0.40	15.00 typ.	2.30 typ.	8.00 typ.

Features

- Open magnetic circuit structure
- Low DCR values
- High saturation current ratings
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- ADAS
- HVAC
- Infotainment

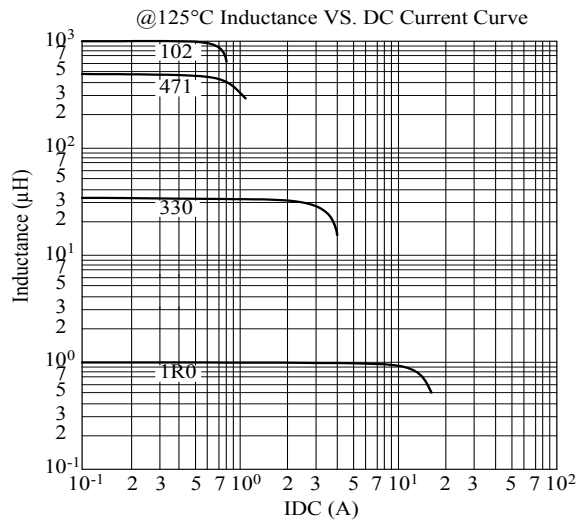
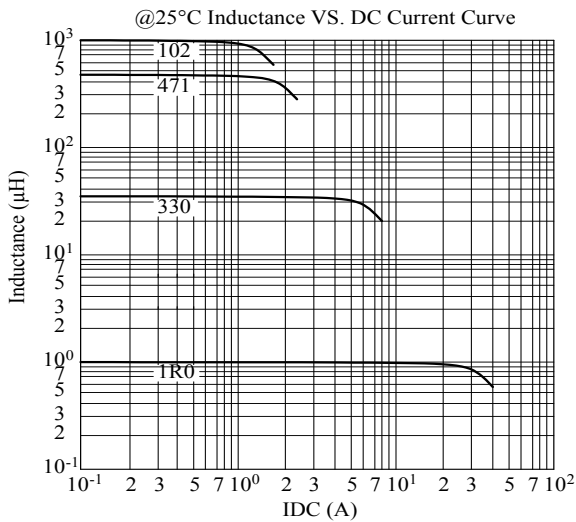


ASB2207 Series

DWG. No.	Inductance (μH) 0.1 V / 100 kHz	RDC (mΩ)	I _{rms} (A) max. ΔT = 40°C	I _{sat} (A) typ. ΔL / LOA = 10%
ASB2207R80MLB-□□□	0.80±20%	2.3±20%	16.0	35.0
ASB22071R2MLB-□□□	1.20±20%	3.2±20%	15.0	30.0
ASB22071R8MLB-□□□	1.80±20%	4.5±20%	13.0	25.0
ASB22072R7MLB-□□□	2.70±20%	7.0±20%	10.0	20.0
ASB22073R3MLB-□□□	3.30±20%	7.8±20%	9.0	17.0
ASB22074R7MLB-□□□	4.70±20%	8.8±20%	8.5	15.0
ASB22075R6MLB-□□□	5.60±20%	12.4±20%	7.8	14.0
ASB22076R8MLB-□□□	6.80±20%	14.2±20%	7.5	12.0
ASB22078R2MLB-□□□	8.20±20%	15.5±20%	7.0	11.0
ASB2207100MLB-□□□	10.00±20%	17.2±20%	6.5	10.0
ASB2207120YLB-□□□	12.00±15%	23.6±20%	5.5	9.5
ASB2207150YLB-□□□	15.00±15%	28.8±20%	5.0	9.0
ASB2207180YLB-□□□	18.00±15%	33.0±20%	4.6	8.0
ASB2207220YLB-□□□	22.00±15%	39.4±20%	4.0	6.5
ASB2207270YLB-□□□	27.00±15%	43.5±20%	3.8	6.0
ASB2207330YLB-□□□	33.00±15%	58.4±20%	3.4	5.5
ASB2207390KLB-□□□	39.00±10%	65.0±20%	3.2	5.2
ASB2207470KLB-□□□	47.00±10%	91.2±20%	2.8	5.0
ASB2207560KLB-□□□	56.00±10%	96.5±20%	2.6	4.5
ASB2207680KLB-□□□	68.00±10%	112.0±20%	2.4	4.0
ASB2207820KLB-□□□	82.00±10%	144.0±20%	2.2	3.5
ASB2207101KLB-□□□	100.00±10%	168.0±20%	2.0	3.0

1. Electrical specifications at 25°C
2. I_{rms} base on temperature rise 40°C max.
3. I_{sat} base on ΔL/LOA=10% typ .

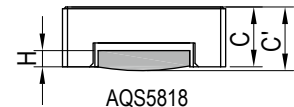
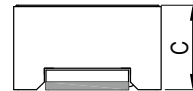
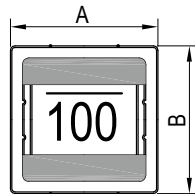
ASB2207 Series



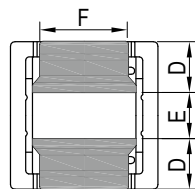
AQS
SERIES

3818 / 4818 / 4828 / 5818 / 5828 / 6822

General



AQS5818
AQS5828
AQS6822



For PCB pattern information,
please see page 56

Unit: mm

Series	A	B	C	C'	D	E	F	H
AQS3818	3.80±0.20	3.80±0.20	1.80±0.20		1.30±0.20	1.20±0.20	2.00±0.20	
AQS4818	4.80±0.20	4.80±0.20	1.80±0.20		1.60±0.20	1.60±0.20	2.90±0.20	
AQS4828	4.80±0.20	4.80±0.20	2.80±0.20		1.60±0.20	1.60±0.20	2.90±0.20	
AQS5818	5.80±0.30	5.80±0.30	1.80±0.20	2.20 max.	1.90±0.30	2.00±0.30	3.40±0.20	0.30 min.
AQS5828	5.80±0.30	5.80±0.30	2.80±0.20	3.20 max.	1.90±0.30	2.00±0.30	3.40±0.20	0.30 min.
AQS6822	6.80±0.30	6.80±0.30	2.30±0.20	2.70max.	2.10±0.30	2.60±0.30	4.25±0.20	0.30 min.

Features

- Magnetic shielding allows high-density mounting
- Low profile
- Low RDC
- High current handling capability
- AEC-Q200 Grade 0: AQS4818
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)
- AEC-Q200 Grade 1: AQS3818, AQS4828, AQS5818, AQS5828, AQS6822
- Operating temp.: -40°C ~ +150°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM



AQS3818 Series

DWG. No.	Inductance (μ H)	RDC (m Ω)		SRF (MHz) typ.	Isat (A) typ.	Irms1 (A) typ.	Irms2 (A) typ.
		typ.	max.				
AQS38181R0YLB-□□□	1.0 \pm 30%	27.5	37.0	165	2.10	2.75	3.60
AQS38181R5YLB-□□□	1.5 \pm 30%	33.0	47.0	125	1.60	2.50	3.10
AQS38182R2YLB-□□□	2.2 \pm 30%	45.5	60.0	95	1.40	2.00	2.60
AQS38182R7YLB-□□□	2.7 \pm 30%	49.5	65.0	90	1.30	1.90	2.50
AQS38183R3YLB-□□□	3.3 \pm 30%	64.5	85.0	75	1.15	1.70	2.10
AQS38183R9YLB-□□□	3.9 \pm 30%	80.0	105.0	70	1.05	1.60	2.00
AQS38184R7YLB-□□□	4.7 \pm 30%	90.0	120.0	60	0.95	1.50	1.90
AQS38186R8YLB-□□□	6.8 \pm 30%	125.0	160.0	50	0.80	1.25	1.60
AQS3818100MLB-□□□	10.0 \pm 20%	180.0	235.0	40	0.65	1.00	1.30
AQS3818150MLB-□□□	15.0 \pm 20%	260.0	340.0	30	0.55	0.80	1.05
AQS3818220MLB-□□□	22.0 \pm 20%	395.0	500.0	25	0.43	0.65	0.80
AQS3818330MLB-□□□	33.0 \pm 20%	590.0	740.0	20	0.34	0.50	0.65
AQS3818470MLB-□□□	47.0 \pm 20%	825.0	1030.0	15	0.30	0.45	0.56
AQS3818680MLB-□□□	68.0 \pm 20%	1280.0	1600.0	13	0.24	0.38	0.46
AQS3818101MLB-□□□	100.0 \pm 20%	2040.0	2600.0	11	0.20	0.28	0.34
AQS3818221MLB-□□□	220.0 \pm 20%	4750.0	5700.0	6	0.16	0.20	0.26

AQS4818 Series

DWG. No.	Inductance (μ H)	RDC (m Ω)		SRF (MHz) typ.	Isat (A) typ.	Irms1 (A) typ.	Irms2 (A) typ.
		typ.	max.				
AQS48181R0YLB-□□□	1.0 \pm 30%	19.2	25.0	140	3.60	4.00	5.10
AQS48181R5YLB-□□□	1.5 \pm 30%	25.2	35.0	105	3.00	3.75	4.70
AQS48182R2YLB-□□□	2.2 \pm 30%	33.7	45.0	90	2.43	2.70	3.50
AQS48183R3YLB-□□□	3.3 \pm 30%	42.8	55.0	70	2.10	2.50	3.10
AQS48183R9YLB-□□□	3.9 \pm 30%	54.5	70.0	65	1.90	2.20	2.70
AQS48184R7YLB-□□□	4.7 \pm 30%	59.4	80.0	55	1.50	2.00	2.60
AQS48185R6YLB-□□□	5.6 \pm 30%	74.3	90.0	50	1.35	1.75	2.30
AQS48186R8YLB-□□□	6.8 \pm 30%	82.1	100.0	45	1.25	1.65	2.20
AQS48188R2YLB-□□□	8.2 \pm 30%	97.7	130.0	43	1.15	1.55	1.90
AQS4818100MLB-□□□	10.0 \pm 20%	109.8	140.0	40	1.05	1.45	1.80
AQS4818120MLB-□□□	12.0 \pm 20%	132.2	170.0	37	0.95	1.30	1.60
AQS4818150MLB-□□□	15.0 \pm 20%	176.7	220.0	30	0.87	1.25	1.50
AQS4818180MLB-□□□	18.0 \pm 20%	214.8	280.0	28	0.79	1.10	1.40
AQS4818220MLB-□□□	22.0 \pm 20%	280.3	360.0	25	0.72	1.00	1.25
AQS4818270MLB-□□□	27.0 \pm 20%	317.6	400.0	22	0.63	0.90	1.15
AQS4818330MLB-□□□	33.0 \pm 20%	399.1	500.0	20	0.56	0.70	0.90
AQS4818390MLB-□□□	39.0 \pm 20%	439.3	540.0	17	0.53	0.63	0.80
AQS4818470MLB-□□□	47.0 \pm 20%	504.1	630.0	16	0.47	0.60	0.75

AQS4828 Series

DWG. No.	Inductance (μH)	RDC (mΩ)		SRF (MHz) typ.	Isat (A) typ.	Irms1 (A) typ.	Irms2 (A) typ.
		typ.	max.				
AQS48281R2YLB-□□□	1.2±30%	18.5	24.0	155.0	3.00	3.50	5.00
AQS48281R8YLB-□□□	1.8±30%	22.7	30.0	105.0	2.50	3.00	4.60
AQS48282R7YLB-□□□	2.7±30%	26.2	34.0	80.0	2.20	2.50	4.00
AQS48283R9YLB-□□□	3.9±30%	36.3	47.0	60.0	1.80	2.20	3.40
AQS48284R7YLB-□□□	4.7±30%	41.4	54.0	50.0	1.60	2.10	3.00
AQS48286R8YLB-□□□	6.8±30%	57.0	74.0	40.0	1.30	1.65	2.60
AQS48288R2YLB-□□□	8.2±30%	66.8	87.0	35.0	1.25	1.60	2.40
AQS4828100MLB-□□□	10.0±20%	76.4	100.0	30.0	1.10	1.50	2.30
AQS4828120MLB-□□□	12.0±20%	100.0	125.0	27.0	0.95	1.35	2.00
AQS4828150MLB-□□□	15.0±20%	108.8	145.0	25.0	0.92	1.30	1.80
AQS4828180MLB-□□□	18.0±20%	125.0	160.0	22.0	0.80	1.20	1.70
AQS4828220MLB-□□□	22.0±20%	145.9	185.0	20.0	0.68	1.10	1.55
AQS4828330MLB-□□□	33.0±20%	208.2	260.0	15.0	0.60	0.90	1.40
AQS4828470MLB-□□□	47.0±20%	215.0	270.0	13.0	0.47	0.88	1.20
AQS4828560MLB-□□□	56.0±20%	260.4	320.0	12.0	0.40	0.85	1.05
AQS4828680MLB-□□□	68.0±20%	294.3	370.0	11.0	0.38	0.80	0.90
AQS4828820MLB-□□□	82.0±20%	381.9	480.0	10.0	0.35	0.70	0.85
AQS4828101MLB-□□□	100.0±20%	495.3	600.0	8.5	0.33	0.65	0.70
AQS4828121MLB-□□□	120.0±20%	630.0	760.0	8.0	0.30	0.50	0.65
AQS4828151MLB-□□□	150.0±20%	713.9	860.0	7.0	0.28	0.45	0.60
AQS4828181MLB-□□□	180.0±20%	899.1	1080.0	6.0	0.26	0.43	0.55
AQS4828221MLB-□□□	220.0±20%	1000.7	1250.0	5.5	0.24	0.41	0.50

AQS5818 Series

DWG. No.	Inductance (μH)	RDC (mΩ)		SRF (MHz) typ.	Isat (A) typ.	Irms1 (A) typ.	Irms2 (A) typ.
		typ.	max.				
AQS58181R5YLB-□□□	1.5±30%	24.0	31.0	100.0	3.90	3.00	4.80
AQS58182R0YLB-□□□	2.0±30%	33.0	43.0	83.0	3.20	2.50	3.50
AQS58183R0YLB-□□□	3.0±30%	58.0	75.0	73.0	2.70	1.90	2.65
AQS58183R9YLB-□□□	3.9±30%	72.0	94.0	63.0	2.40	1.70	2.40
AQS58185R0YLB-□□□	5.0±30%	83.0	108.0	56.0	2.10	1.60	2.20
AQS58186R2YLB-□□□	6.2±30%	95.0	123.0	51.0	1.90	1.50	2.00
AQS58187R5YLB-□□□	7.5±30%	115.0	152.0	43.0	1.75	1.35	1.70
AQS58189R0YLB-□□□	9.0±30%	140.0	185.0	38.0	1.60	1.20	1.60
AQS5818100MLB-□□□	10.0±20%	180.0	235.0	30.0	1.45	1.10	1.50
AQS5818120MLB-□□□	12.0±20%	195.0	250.0	29.0	1.35	1.00	1.45
AQS5818150MLB-□□□	15.0±20%	230.0	300.0	25.0	1.20	0.90	1.30
AQS5818180MLB-□□□	18.0±20%	280.0	365.0	23.0	1.15	0.85	1.20
AQS5818220MLB-□□□	22.0±20%	365.0	475.0	21.0	0.98	0.75	1.05
AQS5818270MLB-□□□	27.0±20%	410.0	510.0	20.0	0.90	0.70	0.95
AQS5818330MLB-□□□	33.0±20%	455.0	570.0	18.0	0.83	0.65	0.90
AQS5818390MLB-□□□	39.0±20%	570.0	710.0	15.0	0.75	0.60	0.85
AQS5818470MLB-□□□	47.0±20%	650.0	810.0	14.0	0.68	0.57	0.80
AQS5818560MLB-□□□	56.0±20%	700.0	875.0	13.0	0.63	0.55	0.75
AQS5818680MLB-□□□	68.0±20%	965.0	1205.0	11.0	0.56	0.47	0.58
AQS5818820MLB-□□□	82.0±20%	1135.0	1420.0	10.0	0.52	0.43	0.55
AQS5818101MLB-□□□	100.0±20%	1515.0	1890.0	9.0	0.47	0.37	0.52
AQS5818121MLB-□□□	120.0±20%	1690.0	2110.0	8.0	0.42	0.35	0.50
AQS5818151MLB-□□□	150.0±20%	2140.0	2675.0	7.0	0.38	0.31	0.44
AQS5818181MLB-□□□	180.0±20%	2700.0	3245.0	6.0	0.34	0.28	0.35
AQS5818221MLB-□□□	220.0±20%	3400.0	4080.0	5.0	0.32	0.24	0.33

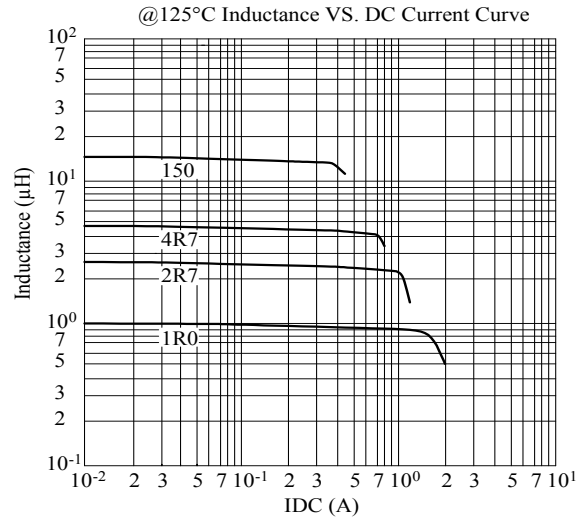
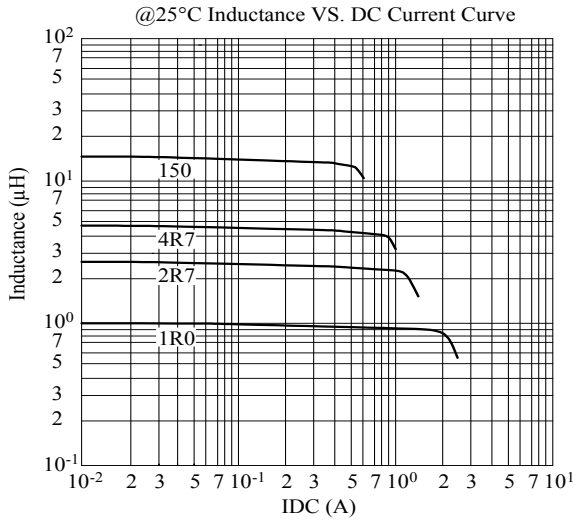
AQS5828 Series

DWG. No.	Inductance (μ H)	RDC (m Ω)		SRF (MHz) typ.	Isat (A) typ.	Irms1 (A) typ.	Irms2 (A) typ.
		typ.	max.				
AQS58282R6YLB-□□□	2.6 \pm 30%	23.0	30.0	78.0	3.15	3.25	4.50
AQS58283R3YLB-□□□	3.3 \pm 30%	27.0	35.0	70.0	2.80	3.20	4.40
AQS58284R7YLB-□□□	4.7 \pm 30%	31.0	40.0	48.0	2.57	3.00	4.00
AQS58285R3YLB-□□□	5.3 \pm 30%	35.0	42.0	46.0	2.20	2.80	3.80
AQS58286R2YLB-□□□	6.2 \pm 30%	45.0	57.0	41.0	2.10	2.60	3.50
AQS58288R2YLB-□□□	8.2 \pm 30%	49.0	63.0	37.0	1.62	2.30	3.00
AQS5828100MLB-□□□	10.0 \pm 20%	64.0	83.0	32.0	1.55	2.00	2.60
AQS5828120MLB-□□□	12.0 \pm 20%	76.0	100.0	25.0	1.50	1.85	2.50
AQS5828150MLB-□□□	15.0 \pm 20%	90.0	115.0	25.0	1.35	1.70	2.25
AQS5828180MLB-□□□	18.0 \pm 20%	100.0	130.0	22.0	1.30	1.60	2.15
AQS5828220MLB-□□□	22.0 \pm 20%	125.0	160.0	19.0	1.15	1.35	1.75
AQS5828270MLB-□□□	27.0 \pm 20%	147.0	180.0	18.0	1.05	1.25	1.65
AQS5828330MLB-□□□	33.0 \pm 20%	190.0	230.0	15.0	0.92	1.10	1.40
AQS5828390MLB-□□□	39.0 \pm 20%	200.0	260.0	14.0	0.86	1.05	1.37
AQS5828470MLB-□□□	47.0 \pm 20%	247.0	305.0	13.0	0.78	1.00	1.33
AQS5828560MLB-□□□	56.0 \pm 20%	315.0	395.0	11.0	0.70	0.85	1.13
AQS5828680MLB-□□□	68.0 \pm 20%	375.0	470.0	10.0	0.65	0.80	1.03
AQS5828820MLB-□□□	82.0 \pm 20%	425.0	530.0	9.0	0.60	0.73	0.95
AQS5828101MLB-□□□	100.0 \pm 20%	550.0	645.0	8.0	0.53	0.60	0.80
AQS5828151MLB-□□□	150.0 \pm 20%	770.0	910.0	7.0	0.45	0.55	0.70
AQS5828181MLB-□□□	180.0 \pm 20%	940.0	1100.0	5.5	0.42	0.48	0.64
AQS5828221MLB-□□□	220.0 \pm 20%	1095.0	1200.0	5.0	0.37	0.45	0.62
AQS5828331MLB-□□□	330.0 \pm 20%	1830.0	2100.0	4.0	0.30	0.35	0.46
AQS5828681MLB-□□□	680.0 \pm 20%	4170.0	4800.0	3.0	0.21	0.23	0.31
AQS5828102MLB-□□□	1000.0 \pm 20%	6360.0	7300.0	2.0	0.13	0.15	0.21

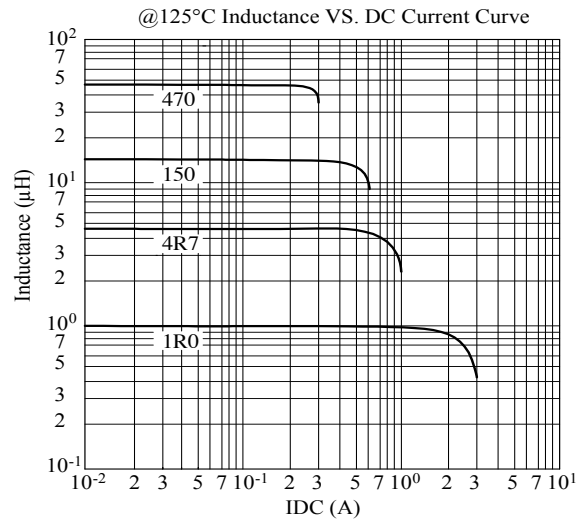
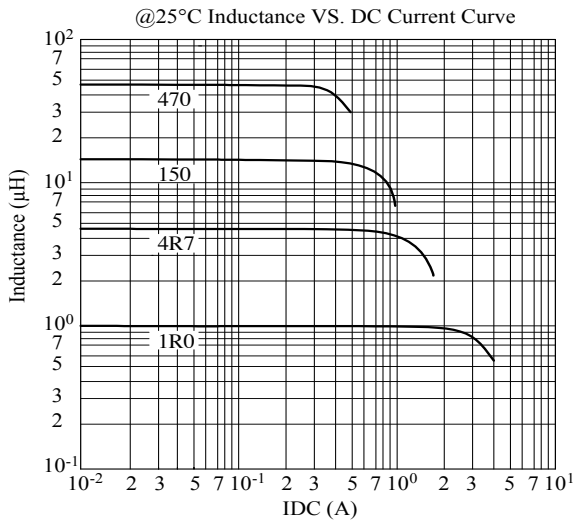
AQS6822 Series							
DWG. No.	Inductance (μH)	RDC (mΩ)		SRF (MHz) typ.	Isat (A) typ.	Irms1 (A) typ.	Irms2 (A) typ.
		typ.	max.				
AQS68221R0YLB-□□□	1.0±30%	15.0	19.0	109.0	4.40	4.20	5.80
AQS68221R5YLB-□□□	1.5±30%	17.0	22.0	77.0	3.50	3.70	5.00
AQS68222R2YLB-□□□	2.2±30%	21.0	27.0	72.0	2.70	3.40	4.80
AQS68223R3YLB-□□□	3.3±30%	25.0	33.0	62.0	2.40	3.00	4.30
AQS68225R0YLB-□□□	5.0±30%	38.0	50.0	48.0	2.00	2.60	3.60
AQS68226R2YLB-□□□	6.2±30%	44.0	57.0	42.0	1.70	2.40	3.40
AQS68227R5YLB-□□□	7.5±30%	49.0	64.0	36.0	1.55	2.30	3.20
AQS6822100MLB-□□□	10.0±20%	68.0	88.0	33.0	1.35	2.00	2.70
AQS6822120MLB-□□□	12.0±20%	70.0	90.0	32.0	1.25	1.90	2.65
AQS6822150MLB-□□□	15.0±20%	84.0	110.0	23.0	1.10	1.70	2.45
AQS6822180MLB-□□□	18.0±20%	100.0	130.0	22.0	1.00	1.60	2.25
AQS6822220MLB-□□□	22.0±20%	126.0	165.0	21.0	0.95	1.40	2.00
AQS6822270MLB-□□□	27.0±20%	167.0	220.0	19.0	0.80	1.25	1.75
AQS6822330MLB-□□□	33.0±20%	200.0	235.0	18.0	0.75	1.10	1.60
AQS6822390MLB-□□□	39.0±20%	232.0	285.0	15.0	0.64	1.05	1.50
AQS6822470MLB-□□□	47.0±20%	283.0	345.0	14.0	0.60	0.95	1.35
AQS6822560MLB-□□□	56.0±20%	314.0	390.0	13.0	0.56	0.85	1.20
AQS6822680MLB-□□□	68.0±20%	391.0	480.0	12.0	0.52	0.80	1.15
AQS6822820MLB-□□□	82.0±20%	437.0	540.0	10.0	0.45	0.77	1.10
AQS6822101MLB-□□□	100.0±20%	560.0	680.0	9.5	0.42	0.67	0.95
AQS6822121MLB-□□□	120.0±20%	628.0	760.0	8.0	0.39	0.58	0.82
AQS6822151MLB-□□□	150.0±20%	945.0	1100.0	7.5	0.34	0.52	0.73
AQS6822181MLB-□□□	180.0±20%	1026.0	1200.0	7.0	0.31	0.48	0.68
AQS6822221MLB-□□□	220.0±20%	1170.0	1380.0	5.5	0.28	0.46	0.65
AQS6822271MLB-□□□	270.0±20%	1510.0	1770.0	5.2	0.24	0.40	0.55
AQS6822331MLB-□□□	330.0±20%	1676.0	2000.0	5.0	0.23	0.36	0.51
AQS6822391MLB-□□□	390.0±20%	2178.0	2600.0	4.8	0.21	0.32	0.46
AQS6822471MLB-□□□	470.0±20%	2693.0	3200.0	4.0	0.19	0.30	0.42
AQS6822561MLB-□□□	560.0±20%	3019.0	3580.0	3.8	0.18	0.27	0.39
AQS6822681MLB-□□□	680.0±20%	3599.0	4300.0	3.2	0.16	0.26	0.36
AQS6822821MLB-□□□	820.0±20%	4639.0	5500.0	3.0	0.14	0.23	0.32
AQS6822102MLB-□□□	1000.0±20%	5742.0	6850.0	2.6	0.13	0.20	0.28

1. Electrical specifications at 25°C
2. Inductance test condition:100kHz / 0.1V
3. Isat base on ΔL/LOA=35% typ.
4. Irms1 base on Temp. rise 20°C typ.
5. Irms2 base on Temp. rise 40°C typ

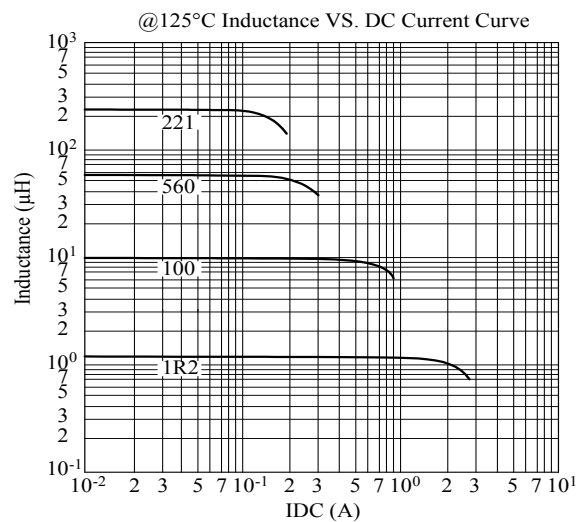
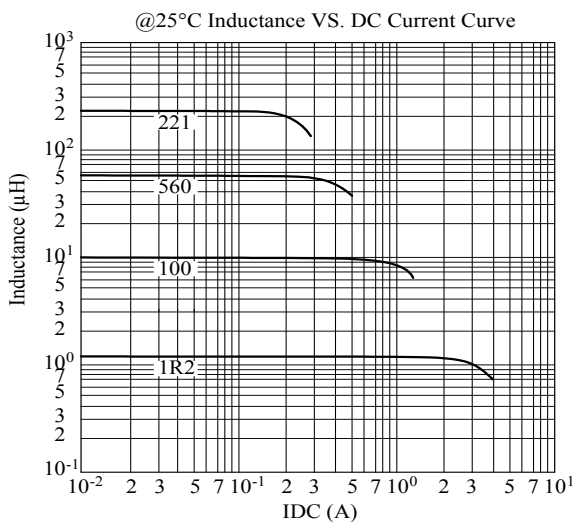
AQS3818 Series



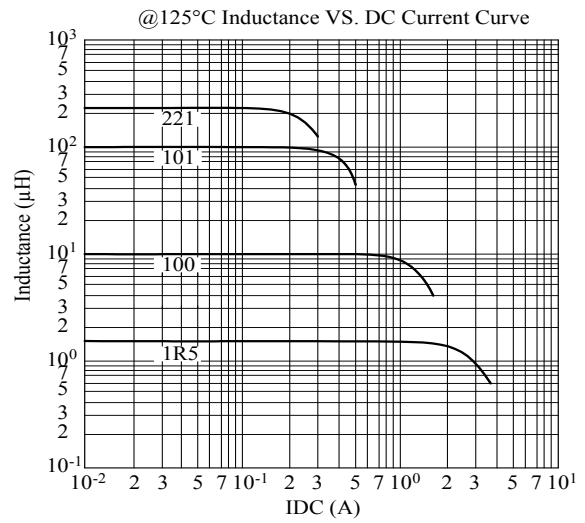
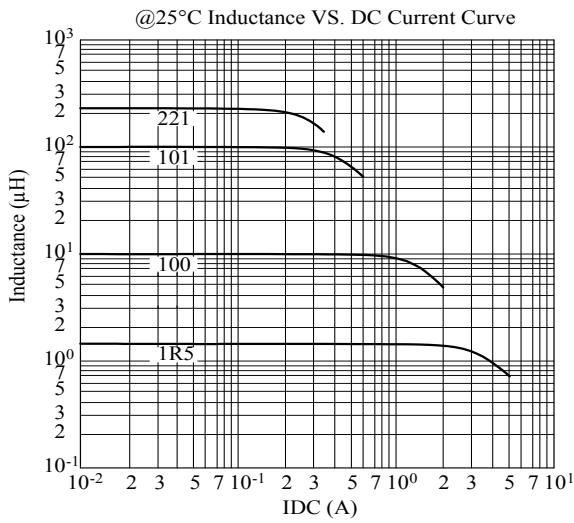
AQS4818 Series



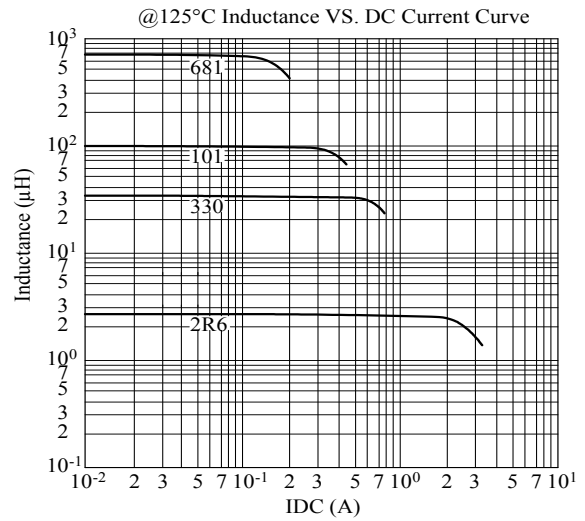
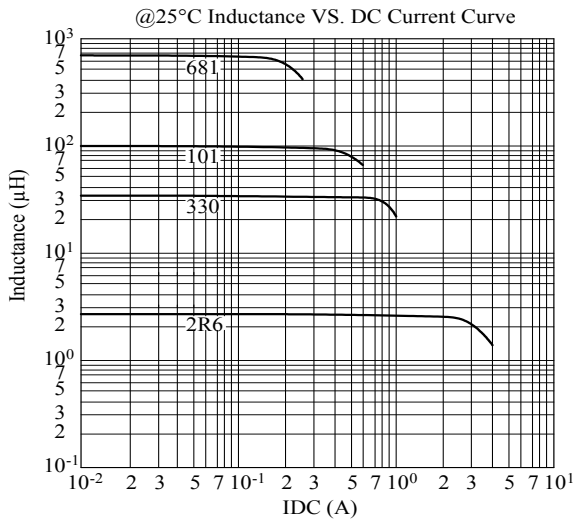
AQS4828 Series



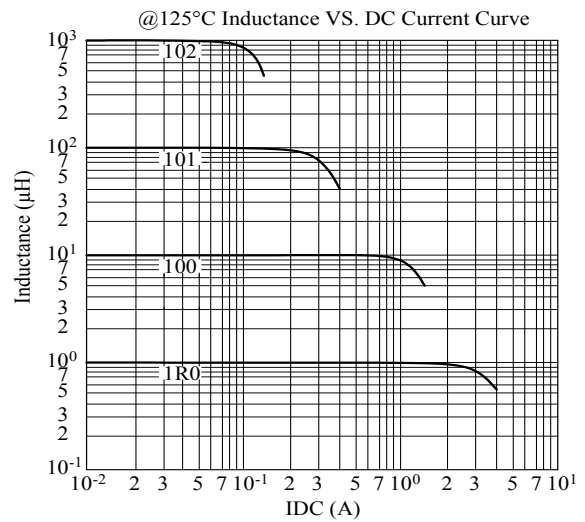
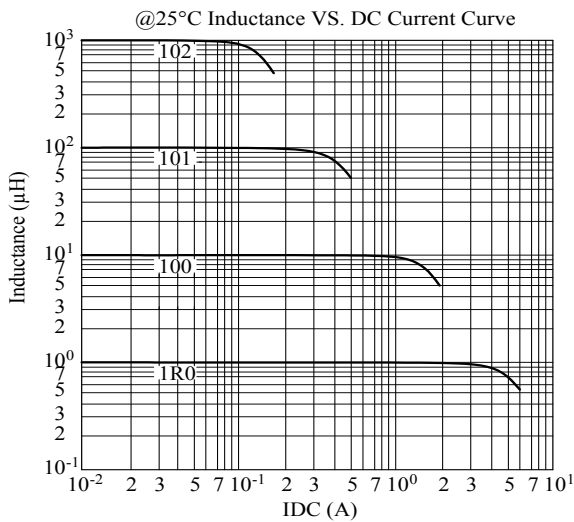
AQS5818 Series



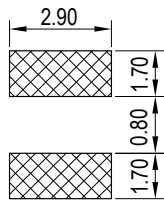
AQS5828 Series



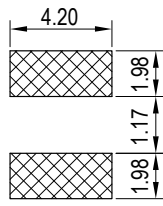
AQS6822 Series



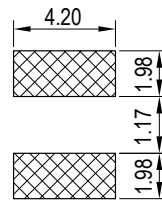
PCB Pattern



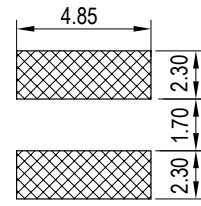
AQS3818



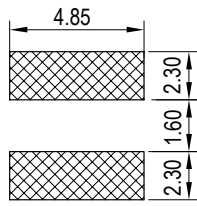
AQS4818



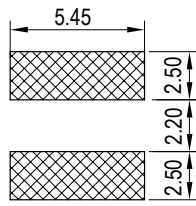
AQS4828



AQS5818



AQS5828

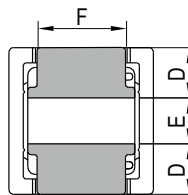
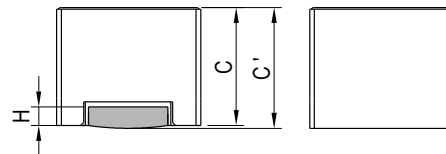
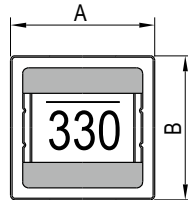


AQS6822

MQS
SERIES

3228 / 5228 / 6828

General



For PCB pattern information,
please see page 60

Unit: mm

Series	A	B	C	C'	D	E	F	H
MQS3228	3.30±0.20	3.30±0.20	2.80±0.20	3.20 max.	1.10±0.20	1.00±0.20	1.50±0.20	0.30 min.
MQS5228	5.20±0.20	5.20±0.20	2.80±0.20	3.20 max.	1.60±0.20	1.90±0.20	3.30±0.20	0.30 min.
MQS6828	6.80±0.30	6.80±0.30	2.80±0.20	3.20 max.	2.10±0.30	2.60±0.30	4.25±0.20	0.30 min.

Features

- Magnetic shielding allows high-density mounting
- Low profile
- Low RDC
- High current handling capability
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +150°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM



MQS3228 Series

DWG. No.	Inductance (μ H)	SRF (MHz) typ.	RDC (Ω)		Isat (A) typ.	Irms1 (A) typ.	Irms2 (A) typ.
			typ.	max.			
MQS3228100YLB-□□□	10.0 \pm 30%	30.0	0.180	0.200	0.90	0.80	1.10
MQS3228150YLB-□□□	15.0 \pm 30%	25.0	0.240	0.290	0.75	0.70	0.90
MQS3228220YLB-□□□	22.0 \pm 30%	20.0	0.300	0.335	0.62	0.60	0.80
MQS3228330YLB-□□□	33.0 \pm 30%	15.0	0.450	0.560	0.50	0.52	0.68
MQS3228470YLB-□□□	47.0 \pm 30%	10.0	0.760	0.950	0.42	0.40	0.52
MQS3228680YLB-□□□	68.0 \pm 30%	8.0	1.400	1.750	0.35	0.30	0.38
MQS3228101YLB-□□□	100.0 \pm 30%	6.0	2.000	2.550	0.29	0.24	0.30

MQS5228 Series

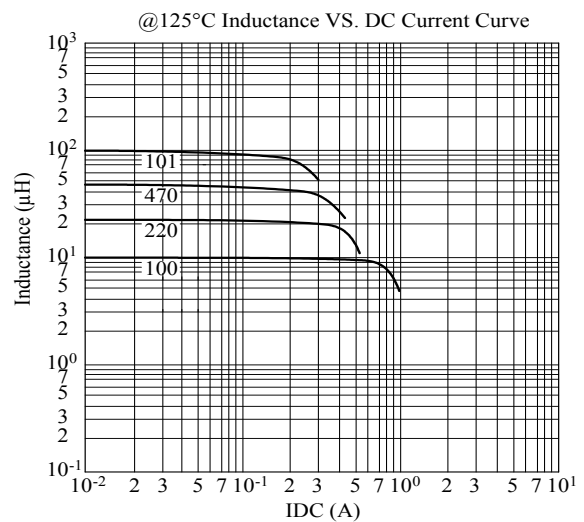
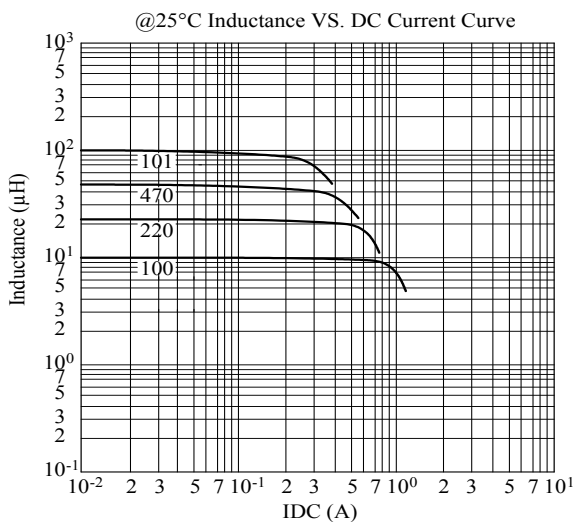
DWG. No.	Inductance (μ H)	SRF (MHz) typ.	RDC (Ω)		Isat (A) typ.	Irms1 (A) typ.	Irms2 (A) typ.
			typ.	max.			
MQS52281R2YLB-□□□	1.2 \pm 30%	170.0	14.0	22.0	4.30	3.90	5.20
MQS52282R2YLB-□□□	2.2 \pm 30%	95.0	21.0	27.0	3.10	3.10	4.10
MQS52283R3YLB-□□□	3.3 \pm 30%	70.0	27.0	32.0	2.30	2.80	3.60
MQS52284R7YLB-□□□	4.7 \pm 30%	55.0	35.0	45.0	2.00	2.45	3.20
MQS52286R8YLB-□□□	6.8 \pm 30%	40.0	45.0	56.0	1.80	2.20	2.80
MQS5228100MLB-□□□	10.0 \pm 20%	28.0	69.0	85.0	1.45	1.70	2.30
MQS5228150MLB-□□□	15.0 \pm 20%	23.0	106.0	140.0	1.25	1.40	1.80
MQS5228220MLB-□□□	22.0 \pm 20%	18.0	150.0	193.0	1.00	1.30	1.70
MQS5228330MLB-□□□	33.0 \pm 20%	14.0	204.0	260.0	0.84	1.00	1.30
MQS5228470MLB-□□□	47.0 \pm 20%	12.0	295.0	360.0	0.70	0.84	1.10
MQS5228680MLB-□□□	68.0 \pm 20%	10.0	445.0	550.0	0.57	0.65	0.90
MQS5228101MLB-□□□	100.0 \pm 20%	8.0	650.0	800.0	0.47	0.57	0.70
MQS5228121MLB-□□□	120.0 \pm 20%	6.0	860.0	1100.0	0.43	0.49	0.65
MQS5228151MLB-□□□	150.0 \pm 20%	5.5	1180.0	1470.0	0.39	0.42	0.55
MQS5228181MLB-□□□	180.0 \pm 20%	5.0	1240.0	1550.0	0.35	0.40	0.52
MQS5228221MLB-□□□	220.0 \pm 20%	4.5	1650.0	2000.0	0.32	0.35	0.46
MQS5228271MLB-□□□	270.0 \pm 20%	4.0	2100.0	2500.0	0.29	0.32	0.42
MQS5228331MLB-□□□	330.0 \pm 20%	3.7	2600.0	3200.0	0.26	0.27	0.36
MQS5228391MLB-□□□	390.0 \pm 20%	3.3	2800.0	3400.0	0.24	0.26	0.35
MQS5228471MLB-□□□	470.0 \pm 20%	3.0	3600.0	4300.0	0.22	0.24	0.31
MQS5228561MLB-□□□	560.0 \pm 20%	2.7	3900.0	4700.0	0.20	0.22	0.28
MQS5228681MLB-□□□	680.0 \pm 20%	2.6	4700.0	5700.0	0.18	0.20	0.26
MQS5228821MLB-□□□	820.0 \pm 20%	2.2	6600.0	7900.0	0.16	0.17	0.22
MQS5228102MLB-□□□	1000.0 \pm 20%	2.1	7200.0	8700.0	0.15	0.16	0.21

MQS6828 Series

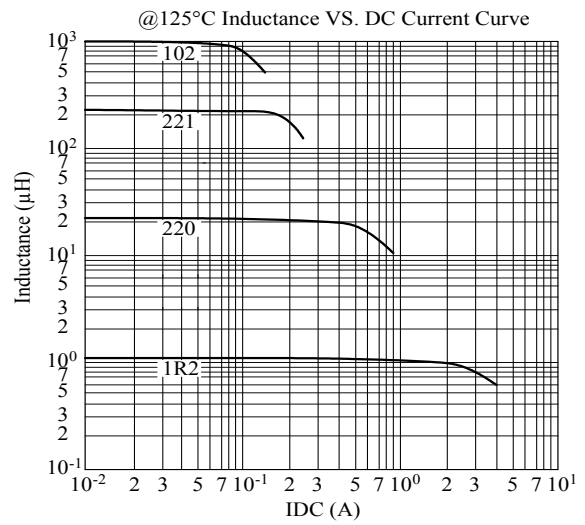
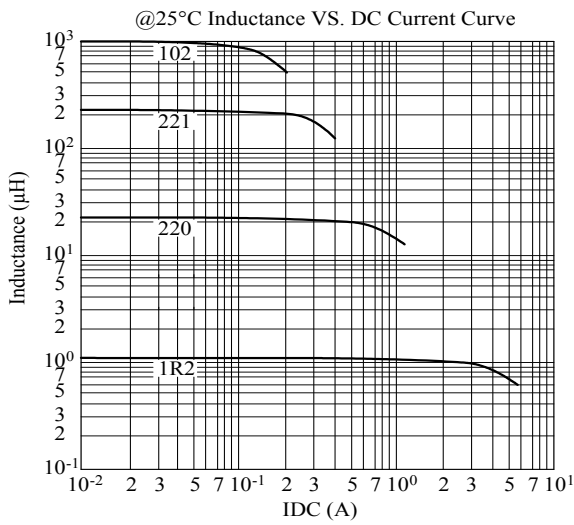
DWG. No.	Inductance (μH)	SRF (MHz) typ.	RDC (Ω)		Isat (A) typ.	I _{rms1} (A) typ.	I _{rms2} (A) typ.
			typ.	max.			
MQS68282R5YLB-□□□	2.5±30%	77.0	23.0	30.0	3.40	4.50	4.90
MQS68283R3YLB-□□□	3.3±30%	63.0	25.0	33.0	3.00	3.30	4.70
MQS68284R3YLB-□□□	4.3±30%	55.0	33.0	43.0	2.60	2.80	4.00
MQS68285R0YLB-□□□	5.0±30%	48.0	38.0	48.0	2.30	2.65	3.80
MQS68286R4YLB-□□□	6.4±30%	42.0	46.0	60.0	2.10	2.35	3.40
MQS68287R7YLB-□□□	7.7±30%	37.0	54.0	70.0	1.90	2.20	3.20
MQS6828100MLB-□□□	10.0±20%	33.0	64.0	84.0	1.75	2.15	2.90
MQS6828150MLB-□□□	15.0±20%	24.0	113.0	145.0	1.40	1.60	2.20
MQS6828220MLB-□□□	22.0±20%	20.0	141.0	180.0	1.15	1.50	2.00
MQS6828330MLB-□□□	33.0±20%	15.0	170.0	205.0	0.92	1.40	1.80
MQS6828470MLB-□□□	47.0±20%	13.0	240.0	290.0	0.80	1.00	1.40
MQS6828680MLB-□□□	68.0±20%	10.0	340.0	410.0	0.67	0.90	1.20
MQS6828101MLB-□□□	100.0±20%	8.0	460.0	555.0	0.55	0.80	1.00
MQS6828151MLB-□□□	150.0±20%	6.0	740.0	890.0	0.44	0.60	0.80
MQS6828221MLB-□□□	220.0±20%	5.5	1057.0	1200.0	0.36	0.45	0.60
MQS6828331MLB-□□□	330.0±20%	4.5	1510.0	1740.0	0.30	0.40	0.55
MQS6828471MLB-□□□	470.0±20%	3.5	2210.0	2540.0	0.25	0.30	0.45
MQS6828681MLB-□□□	680.0±20%	3.0	3180.0	3560.0	0.21	0.25	0.35
MQS6828102MLB-□□□	1000.0±20%	2.5	4070.0	4480.0	0.17	0.20	0.30

1. Electrical specifications at 25°C
2. Inductance Test condition: 100kHz /0.1V
3. Isat base on ΔL/LOA=35%typ.
4. I_{rms1} base on Temp. rise 20°C typ.
5. I_{rms2} base on Temp. rise 40°C typ.

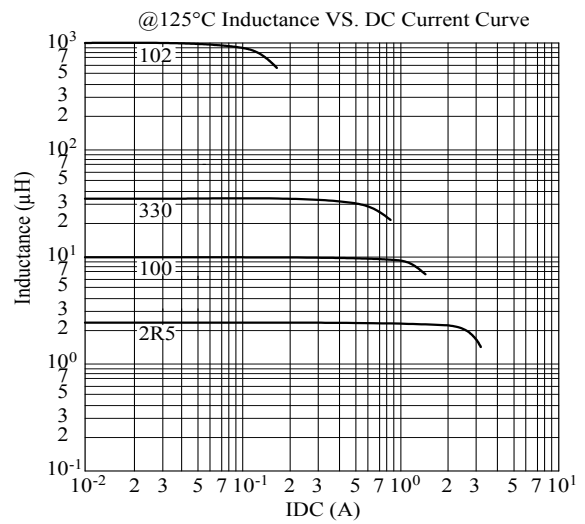
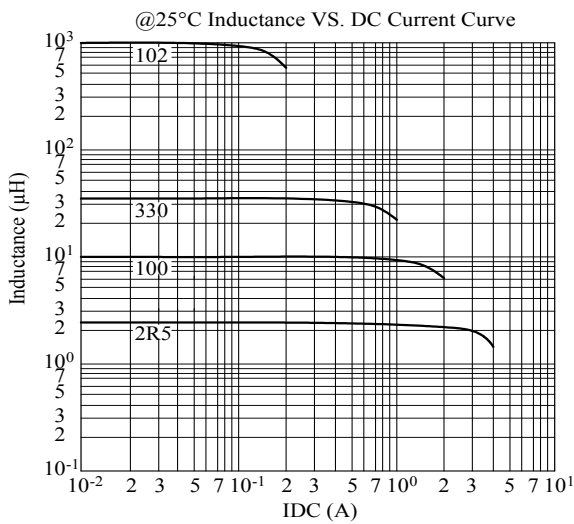
MQS3228 Series



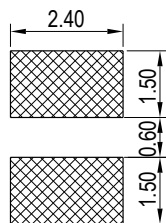
MQS5228 Series



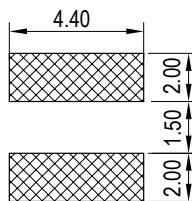
MQS6828 Series



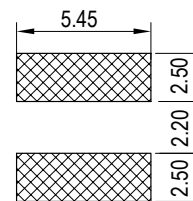
PCB Pattern



MQS3228



MQS5228

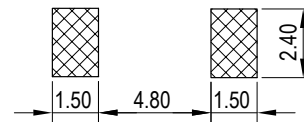
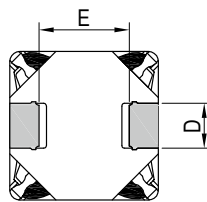
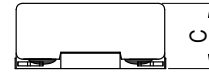
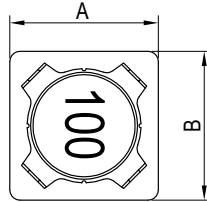


MQS6828

MBS
SERIES

0703 / 0704

General



(PCB Pattern)

Unit: mm

Series	A	B	C	D	E
MBS0703	7.30±0.20	7.30±0.20	3.50±0.20	2.00±0.20	4.60±0.20
MBS0704	7.30±0.20	7.30±0.20	4.50±0.20	2.00±0.20	4.60±0.20

Features

- Low RDC
- High current handling capability
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM



MBS0703 Series

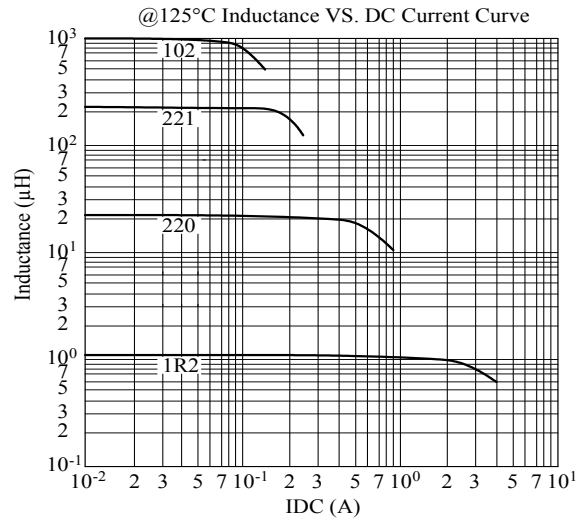
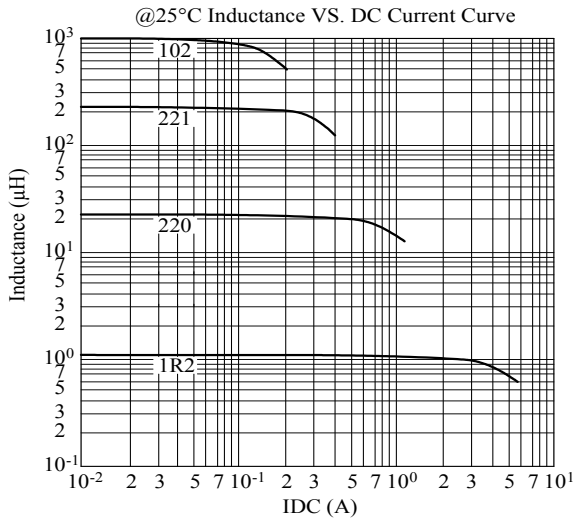
DWG. No.	Inductance (μ H)	Test Freq. (Hz)	RDC (Ω) max.	Isat (A)	Irms (A)
MBS0703100MSB-□□□	10.0 \pm 20%	1k/1V	0.072	1.85	2.10
MBS0703120MSB-□□□	12.0 \pm 20%	1k/1V	0.085	1.60	1.90
MBS0703150MSB-□□□	15.0 \pm 20%	1k/1V	0.105	1.52	1.60
MBS0703180MSB-□□□	18.0 \pm 20%	1k/1V	0.125	1.40	1.40
MBS0703220MSB-□□□	22.0 \pm 20%	1k/1V	0.160	1.28	1.20
MBS0703270MSB-□□□	27.0 \pm 20%	1k/1V	0.185	1.15	1.10
MBS0703330MSB-□□□	33.0 \pm 20%	1k/1V	0.220	1.04	1.00
MBS0703390MSB-□□□	39.0 \pm 20%	1k/1V	0.250	0.96	0.95
MBS0703470MSB-□□□	47.0 \pm 20%	1k/1V	0.320	0.88	0.85
MBS0703560MSB-□□□	56.0 \pm 20%	1k/1V	0.350	0.80	0.78
MBS0703680MSB-□□□	68.0 \pm 20%	1k/1V	0.400	0.74	0.72
MBS0703820MSB-□□□	82.0 \pm 20%	1k/1V	0.480	0.65	0.63
MBS0703101MSB-□□□	100.0 \pm 20%	1k/1V	0.630	0.60	0.54
MBS0703121MSB-□□□	120.0 \pm 20%	1k/1V	0.720	0.55	0.53
MBS0703151MSB-□□□	150.0 \pm 20%	1k/1V	0.930	0.48	0.47
MBS0703181MSB-□□□	180.0 \pm 20%	1k/1V	1.150	0.45	0.43
MBS0703221MSB-□□□	220.0 \pm 20%	1k/1V	1.320	0.42	0.40
MBS0703271MSB-□□□	270.0 \pm 20%	1k/1V	1.700	0.38	0.37
MBS0703331MSB-□□□	330.0 \pm 20%	1k/1V	2.000	0.33	0.33
MBS0703391MSB-□□□	390.0 \pm 20%	1k/1V	2.300	0.30	0.30
MBS0703471MSB-□□□	470.0 \pm 20%	1k/1V	2.800	0.27	0.26
MBS0703561MSB-□□□	560.0 \pm 20%	1k/1V	3.500	0.25	0.23
MBS0703681MSB-□□□	680.0 \pm 20%	1k/1V	4.000	0.22	0.21
MBS0703821MSB-□□□	820.0 \pm 20%	1k/1V	5.200	0.21	0.19
MBS0703102MSB-□□□	1000.0 \pm 20%	1k/1V	5.800	0.18	0.17

MBS0704 Series

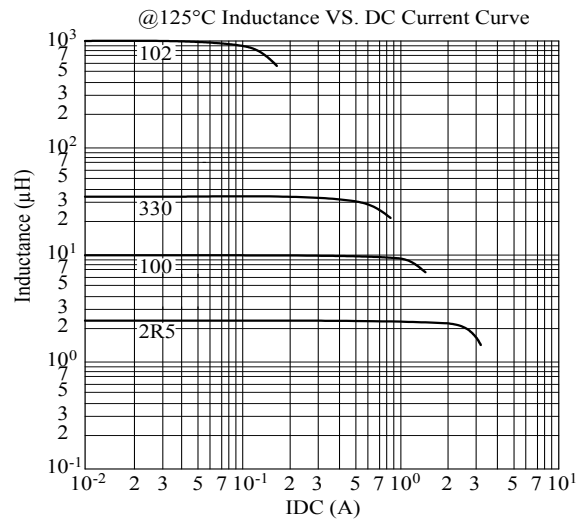
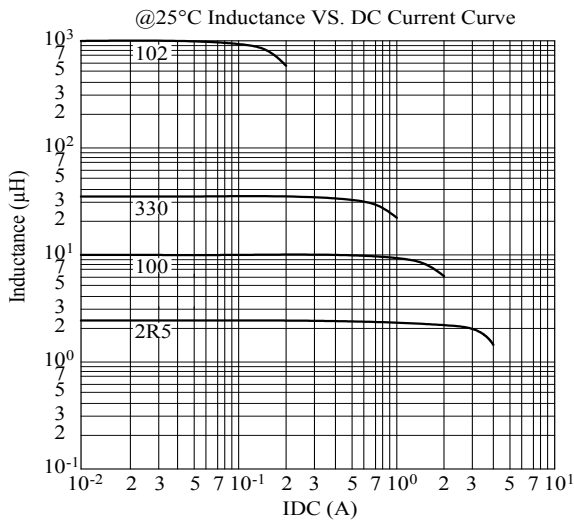
DWG. No.	Inductance (μ H)	Test Freq. (Hz)	RDC (Ω) max.	Isat (A)	Irms (A)
MBS0704100MSB-□□□	10.0 \pm 20%	1k/1V	0.052	2.50	2.10
MBS0704120MSB-□□□	12.0 \pm 20%	1k/1V	0.062	2.30	2.00
MBS0704150MSB-□□□	15.0 \pm 20%	1k/1V	0.075	2.10	1.90
MBS0704180MSB-□□□	18.0 \pm 20%	1k/1V	0.090	1.95	1.80
MBS0704220MSB-□□□	22.0 \pm 20%	1k/1V	0.096	1.75	1.65
MBS0704270MSB-□□□	27.0 \pm 20%	1k/1V	0.130	1.62	1.45
MBS0704330MSB-□□□	33.0 \pm 20%	1k/1V	0.150	1.45	1.35
MBS0704390MSB-□□□	39.0 \pm 20%	1k/1V	0.190	1.30	1.17
MBS0704470MSB-□□□	47.0 \pm 20%	1k/1V	0.210	1.20	1.05
MBS0704560MSB-□□□	56.0 \pm 20%	1k/1V	0.240	1.10	0.95
MBS0704680MSB-□□□	68.0 \pm 20%	1k/1V	0.300	0.96	0.86
MBS0704820MSB-□□□	82.0 \pm 20%	1k/1V	0.400	0.90	0.78
MBS0704101MSB-□□□	100.0 \pm 20%	1k/1V	0.450	0.78	0.70
MBS0704121MSB-□□□	120.0 \pm 20%	1k/1V	0.550	0.70	0.60
MBS0704151MSB-□□□	150.0 \pm 20%	1k/1V	0.760	0.58	0.48
MBS0704181MSB-□□□	180.0 \pm 20%	1k/1V	0.820	0.54	0.46
MBS0704221MSB-□□□	220.0 \pm 20%	1k/1V	0.950	0.50	0.42
MBS0704271MSB-□□□	270.0 \pm 20%	1k/1V	1.200	0.46	0.38
MBS0704331MSB-□□□	330.0 \pm 20%	1k/1V	1.500	0.40	0.34
MBS0704391MSB-□□□	390.0 \pm 20%	1k/1V	1.850	0.36	0.32
MBS0704471MSB-□□□	470.0 \pm 20%	1k/1V	2.200	0.34	0.29
MBS0704561MSB-□□□	560.0 \pm 20%	1k/1V	2.600	0.30	0.26
MBS0704681MSB-□□□	680.0 \pm 20%	1k/1V	2.800	0.28	0.24
MBS0704821MSB-□□□	820.0 \pm 20%	1k/1V	3.500	0.26	0.22
MBS0704102MSB-□□□	1000.0 \pm 20%	1k/1V	4.100	0.24	0.20

1. Electrical specifications at 25°C
2. Inductance Test condition: 1kHz /1V
3. Isatbaseon Δ L/LOA=25%typ.
4. I rms base on Temp. rise 40°C typ.

MBS0703 Series



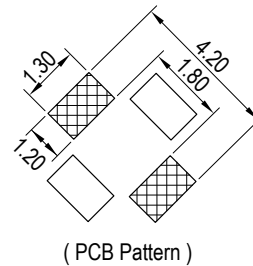
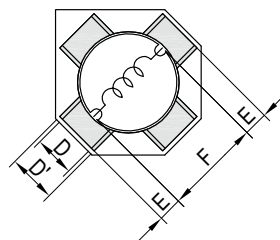
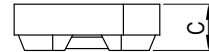
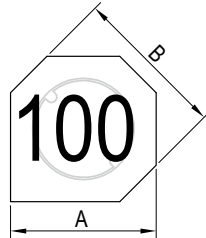
MBS0704 Series



ASU
SERIES

3028

General



Unit: mm

Series	A	B	C	D	D'	E	F
ASU3028	3.30±0.20	3.50±0.20	2.80±0.20	1.10 typ.	1.30±0.30	0.50 typ.	2.30 typ.

Features

- Magnetic shielding allows high-density mounting
- Low profile
- Low RDC
- High current handling capability
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM

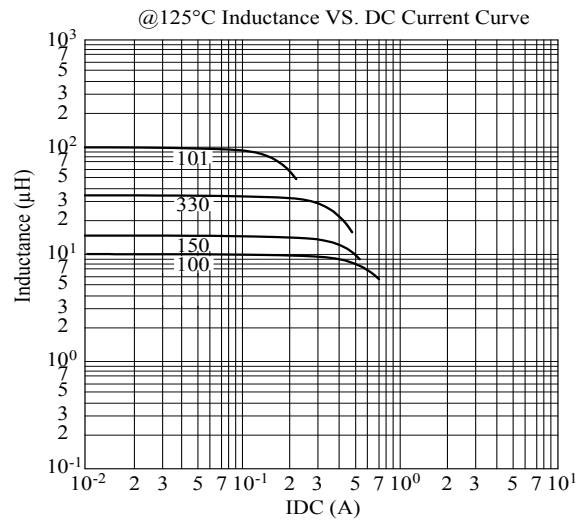
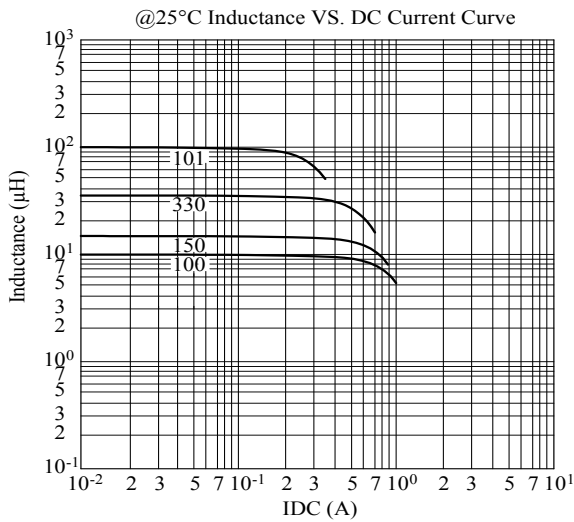


ASU3028 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (Hz)		RDC (mΩ)		SRF (MHz) typ.	I _{rms} (mA) typ.	I _{sat} (mA) typ.
			L	Q	typ.	max.			
ASU3028100YL□-□□□	10.0±30%	20	100k	2.52M	160	200	35	720	860
ASU3028150YL□-□□□	15.0±30%	18	100k	2.52M	230	290	25	660	720
ASU3028220YL□-□□□	22.0±30%	18	100k	2.52M	270	335	15	600	620
ASU3028330YL□-□□□	33.0±30%	20	100k	2.52M	450	560	10	470	480
ASU3028470YL□-□□□	47.0±30%	20	100k	2.52M	815	1000	8	320	380

1. Electrical specifications at 25°C
2. Inductance Test Freq.: 100kHz / 0.1V
3. I_{sat} base on ΔL / L0A=35% typ.
4. I_{rms} base on Temp. rise 40°C typ.

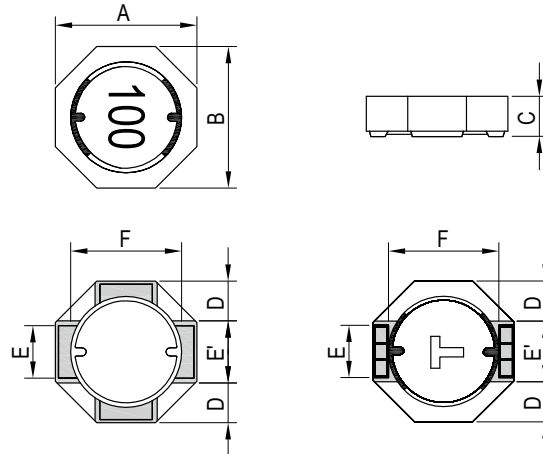
ASU3028 Series



ASU SERIES

5028 / 6025 / 8028 / 8030 / 8040 / 8045 / 8058 /
1028 / 1030 / 1038 / 1040 / 1048 / 1050 / 1065

General



ASU8028 / ASU1028
ASU1038 / ASU1048

For PCB pattern information,
please see page 80

Unit: mm

Series	A	B	C	D	E	E'	F
ASU5028	5.20±0.20	5.20±0.20	2.80±0.20	1.40 typ.	1.80 typ.	2.40±0.40	3.90 typ.
ASU6025	6.20±0.30	6.50±0.30	2.50±0.30	2.00 typ.	2.20 typ.	2.60±0.50	4.90 typ.
ASU8028	8.00±0.30	8.00±0.30	2.80±0.30	2.20 typ.	2.80 typ.	3.70±0.50	6.00 typ.
ASU8030	8.00±0.30	8.00±0.30	2.80±0.30	2.20 typ.	3.20 typ.	3.70±0.50	6.40 typ.
ASU8040	8.00±0.30	8.00±0.30	3.80±0.30	2.20 typ.	3.20 typ.	3.70±0.50	6.40 typ.
ASU8045	8.00±0.30	8.00±0.30	4.50±0.30	2.20 typ.	3.20 typ.	3.70±0.50	6.40 typ.
ASU8058	8.00±0.30	8.00±0.30	5.80±0.30	2.20 typ.	3.20 typ.	3.70±0.50	6.40 typ.
ASU1028	10.00±0.30	10.00±0.30	2.80±0.30	2.50 typ.	3.20 typ.	5.00±0.50	7.40 typ.
ASU1030	10.00±0.30	10.00±0.30	2.80±0.30	2.75 typ.	4.00 typ.	4.50±0.50	8.20 typ.
ASU1038	10.00±0.30	10.00±0.30	3.80±0.30	2.50 typ.	3.20 typ.	5.00±0.50	7.40 typ.
ASU1040	10.00±0.30	10.00±0.30	3.80±0.30	2.75 typ.	4.00 typ.	4.50±0.50	8.20 typ.
ASU1048	10.00±0.30	10.00±0.30	4.80±0.30	2.50 typ.	3.20 typ.	5.00±0.50	7.40 typ.
ASU1050	10.00±0.30	10.00±0.30	4.80±0.30	2.75 typ.	4.00 typ.	4.50±0.50	8.20 typ.
ASU1065	10.00±0.30	10.00±0.30	6.60±0.30	2.75 typ.	4.00 typ.	4.50±0.50	8.20 typ.

Features

- Magnetic shielding allows high-density mounting
- Low profile
- Low RDC
- High current handling capability
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM



ASU5028 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (Hz)		RDC (mΩ)		SRF (MHz) typ.	I _{rms} (mA) typ.	I _{sat} (mA) typ.
			L	Q	typ.	max.			
ASU50281R2YLB-□□□	1.2±30%	10.0	100k	7.96M	16.8	22.0	200	3500	3400
ASU50282R2YLB-□□□	2.2±30%	10.0	100k	7.96M	21.0	27.0	130	3200	2500
ASU50283R3YLB-□□□	3.3±30%	10.0	100k	7.96M	24.0	32.0	90	2800	2100
ASU50284R7YLB-□□□	4.7±30%	9.0	100k	7.96M	32.0	45.0	50	2200	1850
ASU50286R8YLB-□□□	6.8±30%	10.0	100k	7.96M	42.0	56.0	55	2000	1550
ASU5028100YLB-□□□	10.0±30%	18.0	100k	2.52M	63.0	85.0	25	1800	1400
ASU5028150YLB-□□□	15.0±30%	18.0	100k	2.52M	108.0	140.0	23	1100	1000
ASU5028220YLB-□□□	22.0±30%	15.0	100k	2.52M	162.0	210.0	18	950	850
ASU5028330YLB-□□□	33.0±30%	15.0	100k	2.52M	203.0	260.0	16	800	680
ASU5028470YLB-□□□	47.0±30%	13.0	100k	2.52M	285.0	360.0	13	700	620
ASU5028680YLB-□□□	68.0±30%	13.0	100k	2.52M	450.0	550.0	10	560	460
ASU5028101YLB-□□□	100.0±30%	15.0	100k	796k	625.0	800.0	8	470	420

ASU6025 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (Hz)		RDC (mΩ)		SRF (MHz) typ.	I _{rms} (mA) typ.	I _{sat} (mA) typ.
			L	Q	typ.	max.			
ASU60251R2YFB-□□□	1.2±30%	8	100k	7.96M	14.5	19	120	4000	3200
ASU60252R2YFB-□□□	2.2±30%	8	100k	7.96M	18.5	24	65	3400	2350
ASU60253R3YFB-□□□	3.3±30%	8	100k	7.96M	21.0	27	50	3200	2000
ASU60254R7YFB-□□□	4.7±30%	8	100k	7.96M	27.0	35	42	2700	1550
ASU60256R8YFB-□□□	6.8±30%	8	100k	7.96M	32.0	42	36	2400	1300
ASU60258R2YFB-□□□	8.2±30%	8	100k	7.96M	40.0	52	30	2200	1250
ASU6025100YFB-□□□	10.0±30%	12	100k	2.52M	44.0	57	25	2000	1050
ASU6025150YFB-□□□	15.0±30%	12	100k	2.52M	66.0	86	22	1800	920
ASU6025220YFB-□□□	22.0±30%	12	100k	2.52M	100.0	130	18	1600	700
ASU6025330YFB-□□□	33.0±30%	12	100k	2.52M	140.0	180	12	1200	640
ASU6025470YFB-□□□	47.0±30%	12	100k	2.52M	190.0	250	10	1000	480
ASU6025680YFB-□□□	68.0±30%	10	100k	2.52M	280.0	365	8	800	400
ASU6025101YFB-□□□	100.0±30%	24	100k	796k	385.0	500	7	700	350
ASU6025151YFB-□□□	150.0±30%	30	100k	796k	590.0	770	5	540	280
ASU6025221YFB-□□□	220.0±30%	20	100k	796k	950.0	1250	4	420	240

ASU8028 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq.		RDC (mΩ)		SRF (MHz) typ.	I _{rms} (A)	I _{sat} (A)
			L (kHz)	Q (MHz)	typ.	max.			
ASU80282R5YFB-□□□	2.5±30%	15	100	7.96	13.6	18.0	65.0	4.50	4.20
ASU80283R3YFB-□□□	3.3±30%	12	100	7.96	17.5	23.0	60.0	3.60	3.50
ASU80284R7YFB-□□□	4.7±30%	15	100	7.96	20.0	26.0	50.0	3.70	3.20
ASU80286R8YFB-□□□	6.8±30%	13	100	7.96	34.0	45.0	40.0	2.80	2.50
ASU80288R2YFB-□□□	8.2±30%	11	100	7.96	45.0	54.0	38.0	2.60	2.30
ASU8028100YFB-□□□	10.0±30%	22	100	2.52	45.0	57.0	35.0	2.60	2.20
ASU8028150YFB-□□□	15.0±30%	20	100	2.52	66.0	85.0	25.0	2.00	1.70
ASU8028220YFB-□□□	22.0±30%	22	100	2.52	106.0	130.0	20.0	1.60	1.50
ASU8028330YFB-□□□	33.0±30%	20	100	2.52	147.0	185.0	15.0	1.30	1.10
ASU8028470YFB-□□□	47.0±30%	14	100	2.52	177.0	230.0	12.0	1.20	1.00
ASU8028680YFB-□□□	68.0±30%	23	100	2.52	317.0	390.0	9.0	0.85	0.80
ASU8028101YFB-□□□	100.0±30%	20	100	0.796	390.0	500.0	8.0	0.75	0.70

ASU8030 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq.		RDC (mΩ)		SRF (MHz) typ.	I _{rms} (A) typ.	I _{sat} (A) typ.
			L (kHz)	Q (MHz)	typ.	max.			
ASU80303R3YFB-□□□	3.3±30%	12	100	7.96	15.6	22.0	55.0	5.00	4.60
ASU80304R7YFB-□□□	4.7±30%	10	100	7.96	22.0	30.0	42.0	4.60	3.80
ASU80306R8YFB-□□□	6.8±30%	10	100	7.96	34.5	46.0	30.0	3.60	3.20
ASU8030100YFB-□□□	10.0±30%	18	100	2.52	47.3	60.0	25.0	3.00	2.60
ASU8030150YFB-□□□	15.0±30%	18	100	2.52	75.0	100.0	20.0	2.20	2.00
ASU8030220YFB-□□□	22.0±30%	18	100	2.52	105.0	130.0	16.0	2.00	1.75
ASU8030330YFB-□□□	33.0±30%	16	100	2.52	144.0	180.0	14.0	1.60	1.45
ASU8030470YFB-□□□	47.0±30%	16	100	2.52	205.0	260.0	12.0	1.45	1.25
ASU8030680YFB-□□□	68.0±30%	16	100	2.52	250.0	315.0	9.0	1.25	0.96
ASU8030101YFB-□□□	100.0±30%	24	100	0.796	415.0	520.0	7.0	0.85	0.75

ASU8040 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq.		RDC (mΩ)		SRF (MHz) typ.	I _{rms} (A) typ.	I _{sat} (A) typ.
			L (kHz)	Q (MHz)	typ.	max.			
ASU80403R3YFB-□□□	3.3±30%	12	100	7.96	13.8	18.0	40.0	6.00	5.00
ASU80404R2YFB-□□□	4.2±30%	12	100	7.96	16.5	22.0	32.0	5.30	4.60
ASU80406R2YFB-□□□	6.2±30%	10	100	7.96	25.0	32.0	28.0	4.20	4.00
ASU8040100YFB-□□□	10.0±30%	22	100	2.52	38.0	52.0	20.0	3.70	2.90
ASU8040150YFB-□□□	15.0±30%	20	100	2.52	55.0	70.0	18.0	2.80	2.50
ASU8040220YFB-□□□	22.0±30%	22	100	2.52	88.0	110.0	15.0	2.20	2.05
ASU8040330YFB-□□□	33.0±30%	22	100	2.52	115.0	150.0	12.0	1.90	1.75
ASU8040470YFB-□□□	47.0±30%	20	100	2.52	150.0	190.0	10.0	1.55	1.45
ASU8040680YFB-□□□	68.0±30%	18	100	2.52	205.0	260.0	8.0	1.35	1.10
ASU8040101YFB-□□□	100.0±30%	25	100	0.796	325.0	410.0	6.0	1.05	0.92
ASU8040151YFB-□□□	150.0±30%	18	100	0.796	445.0	560.0	5.0	0.90	0.77

ASU8045 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq.		RDC (mΩ)		SRF (MHz) typ.	I _{rms} (A)	I _{sat} (A)
			L (kHz)	Q (MHz)	typ.	max.			
ASU80453R5YFB-□□□	3.5±30%	12	100	7.96	18.8	25.0	45.0	5.00	5.00
ASU80454R7YFB-□□□	4.7±30%	10	100	7.96	22.0	27.5	30.0	4.60	4.40
ASU80456R2YFB-□□□	6.2±30%	10	100	7.96	28.5	36.0	23.0	4.20	3.80
ASU8045100YFB-□□□	10.0±30%	16	100	2.52	35.0	48.0	18.0	3.50	3.30
ASU8045220YFB-□□□	22.0±30%	18	100	2.52	94.0	122.0	12.0	2.25	2.15
ASU8045330YFB-□□□	33.0±30%	14	100	2.52	118.0	150.0	8.0	2.00	1.80
ASU8045470YFB-□□□	47.0±30%	12	100	2.52	215.0	270.0	6.0	1.45	1.40
ASU8045680YFB-□□□	68.0±30%	8	100	2.52	320.0	400.0	4.0	1.25	1.20
ASU8045101YFB-□□□	100.0±30%	20	100	0.796	400.0	500.0	3.0	1.00	0.92

ASU8058 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq.		RDC (mΩ)		SRF (MHz) typ.	I _{rms} (A)	I _{sat} (A)
			L (kHz)	Q (MHz)	typ.	max.			
ASU80583R9YFB-□□□	3.9±30%	8	100	7.96	12.0	16.0	45.0	6.50	4.50
ASU80585R2YFB-□□□	5.2±30%	8	100	7.96	14.0	17.5	35.0	5.80	3.90
ASU80586R8YFB-□□□	6.8±30%	8	100	7.96	16.0	20.0	30.0	5.50	4.00
ASU8058100YFB-□□□	10.0±30%	20	100	2.52	18.6	25.0	18.0	4.60	3.00
ASU8058220YFB-□□□	22.0±30%	20	100	2.52	42.0	52.0	14.0	3.40	1.80
ASU8058330YFB-□□□	33.0±30%	16	100	2.52	58.0	72.0	10.0	2.70	1.60
ASU8058470YFB-□□□	47.0±30%	12	100	2.52	80.0	100.0	7.0	2.30	1.50
ASU8058680YFB-□□□	68.0±30%	16	100	2.52	100.0	130.0	6.0	2.00	1.20
ASU8058101YFB-□□□	100.0±30%	22	100	0.796	124.0	160.0	5.0	1.70	0.90

ASU1028 Series

DWG. No.	Inductance (μ H)	Q ref.	SRF (MHz) typ.	RDC (m Ω)		Irms (A) max.	Isat (A) typ.
				typ.	max.		
ASU10281R0YFB-□□□	1.00 \pm 30%	14	100	4.9	6.5	7.00	8.00
ASU10281R5YFB-□□□	1.50 \pm 30%	12	80	7.3	10.0	6.50	6.50
ASU10282R2YFB-□□□	2.20 \pm 30%	12	65	11.0	15.0	5.30	4.80
ASU10283R3YFB-□□□	3.30 \pm 30%	14	55	15.0	20.0	4.60	4.30
ASU10284R7YFB-□□□	4.70 \pm 30%	12	40	16.5	23.0	4.50	3.80
ASU10286R8YFB-□□□	6.80 \pm 30%	12	30	25.0	33.0	3.50	3.00
ASU10288R2YFB-□□□	8.20 \pm 30%	12	28	28.5	37.0	3.30	2.70
ASU1028100YFB-□□□	10.00 \pm 30%	20	25	40.0	53.0	2.80	2.40
ASU1028150YFB-□□□	15.00 \pm 30%	26	22	69.0	90.0	2.00	2.00
ASU1028220YFB-□□□	22.00 \pm 30%	26	16	104.0	135.0	1.60	1.40
ASU1028330YFB-□□□	33.00 \pm 30%	24	12	139.0	180.0	1.25	1.20
ASU1028470YFB-□□□	47.00 \pm 30%	20	11	167.0	230.0	1.30	1.10
ASU1028560YFB-□□□	56.00 \pm 30%	22	10	208.0	270.0	1.10	1.00
ASU1028680YFB-□□□	68.00 \pm 30%	20	9	232.0	300.0	1.00	0.90
ASU1028820YFB-□□□	82.00 \pm 30%	20	8	323.0	420.0	0.90	0.85
ASU1028101YFB-□□□	100.00 \pm 30%	20	7	365.0	470.0	0.85	0.80
ASU1028121YFB-□□□	120.00 \pm 30%	18	6	428.0	560.0	0.70	0.70
ASU1028151YFB-□□□	150.00 \pm 30%	18	5	518.0	680.0	0.65	0.65

ASU1030 Series

DWG. No.	Inductance (μ H)	Q ref.	SRF (MHz) typ.	RDC (m Ω)		Irms (A) typ.	Isat (A) typ.
				typ.	max.		
ASU10303R5YFB-□□□	3.5 \pm 30%	16	45	20.5	27.0	5.00	5.20
ASU10304R7YFB-□□□	4.7 \pm 30%	14	36	25.0	32.5	4.20	4.40
ASU10306R2YFB-□□□	6.2 \pm 30%	12	30	32.0	42.0	3.80	3.90
ASU1030100YFB-□□□	10.0 \pm 30%	16	26	44.0	58.0	3.00	3.10
ASU1030150YFB-□□□	15.0 \pm 30%	16	22	73.0	95.0	2.60	2.55
ASU1030220YFB-□□□	22.0 \pm 30%	16	18	110.0	145.0	2.00	2.10
ASU1030330YFB-□□□	33.0 \pm 30%	12	14	150.0	195.0	1.70	1.74
ASU1030470YFB-□□□	47.0 \pm 30%	14	12	210.0	270.0	1.40	1.35
ASU1030680YFB-□□□	68.0 \pm 30%	14	10	285.0	370.0	1.20	1.22
ASU1030101YFB-□□□	100.0 \pm 30%	14	8.5	395.0	520.0	1.10	1.02
ASU1030151YFB-□□□	150.0 \pm 30%	12	5.5	640.0	840.0	0.85	0.84

ASU1038 Series

DWG. No.	Inductance (μ H)	Q ref.	SRF (MHz) typ.	RDC (m Ω)		Irms (A) max.	Isat (A) typ.
				typ.	max.		
ASU10381R5YFB-□□□	1.5 \pm 30%	14	65	5.2	7.5	7.20	7.00
ASU10382R2YFB-□□□	2.2 \pm 30%	12	55	7.7	10.5	6.80	6.50
ASU10383R5YFB-□□□	3.5 \pm 30%	14	35	11.5	15.0	5.50	5.50
ASU10385R0YFB-□□□	5.0 \pm 30%	12	30	14.5	22.0	4.60	4.80
ASU10386R2YFB-□□□	6.2 \pm 30%	12	25	16.5	24.0	4.00	4.20
ASU1038100YFB-□□□	10.0 \pm 30%	24	20	25.0	35.0	3.80	3.60
ASU1038150YFB-□□□	15.0 \pm 30%	24	16	37.0	50.0	2.80	2.70
ASU1038220YFB-□□□	22.0 \pm 30%	20	12	55.8	75.0	2.20	2.30
ASU1038330YFB-□□□	33.0 \pm 30%	22	10	86.0	112.0	1.80	1.80
ASU1038470YFB-□□□	47.0 \pm 30%	22	8	121.0	160.0	1.65	1.60
ASU1038680YFB-□□□	68.0 \pm 30%	24	7	166.0	216.0	1.30	1.30
ASU1038101YFB-□□□	100.0 \pm 30%	24	6	220.0	300.0	1.10	1.10
ASU1038151YFB-□□□	150.0 \pm 30%	20	5	358.0	476.0	0.90	0.80
ASU1038221YFB-□□□	220.0 \pm 30%	22	4	565.0	740.0	0.65	0.65
ASU1038331YFB-□□□	330.0 \pm 30%	20	3	773.0	1000.0	0.55	0.52

ASU1040 Series

DWG. No.	Inductance (μ H)	Q ref.	SRF (MHz) typ.	RDC (m Ω)		I _{rms} (A) typ.	I _{sat} (A) typ.
				typ.	max.		
ASU10403R8YFB-□□□	3.8±30%	14	40.0	13.5	18.0	6.60	5.80
ASU10405R0YFB-□□□	5.0±30%	12	28.0	17.5	23.0	5.20	4.70
ASU10406R2YFB-□□□	6.2±30%	12	24.0	21.5	28.0	4.70	4.30
ASU1040100YFB-□□□	10.0±30%	16	22.0	32.0	42.0	4.40	3.80
ASU1040150YFB-□□□	15.0±30%	18	16.0	60.0	78.0	2.90	2.80
ASU1040220YFB-□□□	22.0±30%	16	12.0	75.0	98.0	2.55	2.48
ASU1040330YFB-□□□	33.0±30%	16	10.0	110.0	140.0	2.05	2.00
ASU1040470YFB-□□□	47.0±30%	16	8.0	170.0	220.0	1.62	1.56
ASU1040680YFB-□□□	68.0±30%	16	7.0	245.0	320.0	1.45	1.40
ASU1040101YFB-□□□	100.0±30%	14	6.0	320.0	415.0	1.18	1.14
ASU1040221YFB-□□□	220.0±30%	14	4.0	760.0	950.0	0.78	0.72
ASU1040331YFB-□□□	330.0±30%	14	2.5	1080.0	1350.0	0.62	0.60

ASU1048 Series

DWG. No.	Inductance (μ H)	Q ref.	SRF (MHz) typ.	RDC (m Ω)		I _{rms} (A) max.	I _{sat} (A) typ.
				typ.	max.		
ASU10481R5YFB-□□□	1.5±30%	14	70.0	4.3	5.8	7.00	7.20
ASU10482R2YFB-□□□	2.2±30%	14	55.0	5.3	7.2	6.50	6.30
ASU10483R0YFB-□□□	3.0±30%	14	40.0	7.2	10.0	6.20	6.00
ASU10484R7YFB-□□□	4.7±30%	12	30.0	9.5	12.5	5.50	4.75
ASU10486R8YFB-□□□	6.8±30%	10	20.0	13.6	18.0	4.80	4.10
ASU10488R2YFB-□□□	8.2±30%	8	18.0	15.0	20.0	4.60	3.80
ASU1048100YFB-□□□	10.0±30%	26	16.0	18.5	25.0	4.50	3.70
ASU1048150YFB-□□□	15.0±30%	30	14.0	29.0	40.0	3.20	2.70
ASU1048220YFB-□□□	22.0±30%	22	12.0	42.0	55.0	2.60	2.00
ASU1048330YFB-□□□	33.0±30%	24	10.0	63.0	84.0	2.10	1.70
ASU1048470YFB-□□□	47.0±30%	26	8.0	94.0	120.0	1.70	1.50
ASU1048560YFB-□□□	56.0±30%	26	7.0	110.0	145.0	1.60	1.40
ASU1048680YFB-□□□	68.0±30%	24	6.0	127.0	170.0	1.40	1.25
ASU1048820YFB-□□□	82.0±30%	24	5.5	149.0	200.0	1.30	1.10
ASU1048101YFB-□□□	100.0±30%	26	5.0	160.0	220.0	1.20	1.00
ASU1048151YFB-□□□	150.0±30%	24	4.5	235.0	305.0	1.00	0.80
ASU1048221YFB-□□□	220.0±30%	20	4.0	350.0	455.0	0.80	0.70
ASU1048331YFB-□□□	330.0±30%	18	3.0	490.0	640.0	0.65	0.52

ASU1050 Series

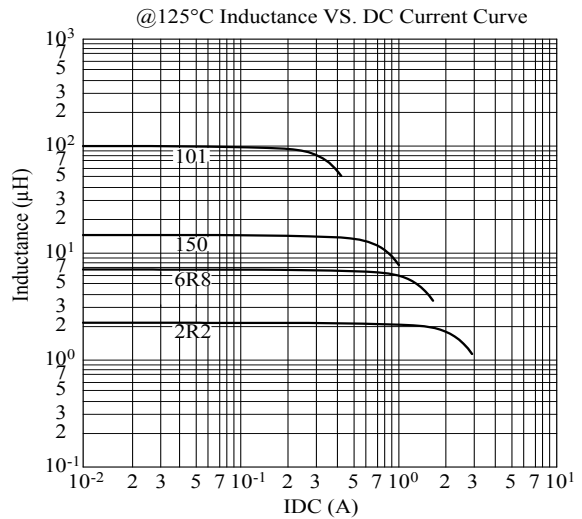
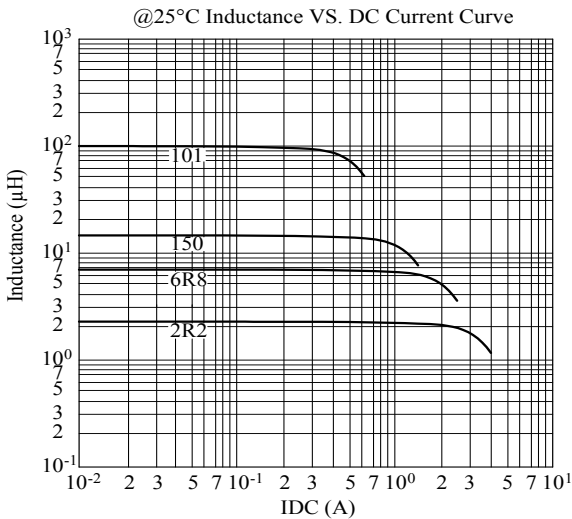
DWG. No.	Inductance (μ H)	Q ref.	SRF (MHz) typ.	RDC (m Ω)		I _{rms} (A) typ.	I _{sat} (A) typ.
				typ.	max.		
ASU10504R7YFB-□□□	4.7±30%	13	34.0	14.5	19.0	5.20	5.10
ASU1050100YFB-□□□	10.0±30%	16	20.0	26.0	34.0	4.40	3.80
ASU1050220YFB-□□□	22.0±30%	16	10.0	58.0	76.0	2.90	2.70
ASU1050330YFB-□□□	33.0±30%	14	8.5	70.0	90.0	2.70	2.10
ASU1050470YFB-□□□	47.0±30%	14	7.0	100.0	130.0	2.10	1.80
ASU1050680YFB-□□□	68.0±30%	14	6.5	144.0	186.0	1.75	1.45
ASU1050101YFB-□□□	100.0±30%	16	5.0	198.0	260.0	1.50	1.25
ASU1050151YFB-□□□	150.0±30%	16	4.0	330.0	430.0	1.15	1.05
ASU1050221YFB-□□□	220.0±30%	14	3.5	470.0	610.0	0.95	0.88
ASU1050331YFB-□□□	330.0±30%	11	2.5	690.0	900.0	0.84	0.70
ASU1050471YFB-□□□	470.0±30%	11	1.9	1050.0	1350.0	0.65	0.55
ASU1050681YFB-□□□	680.0±30%	11	1.6	1350.0	1760.0	0.56	0.48
ASU1050102YFB-□□□	1000.0±30%	30	1.4	2120.0	2760.0	0.47	0.40

ASU1065 Series

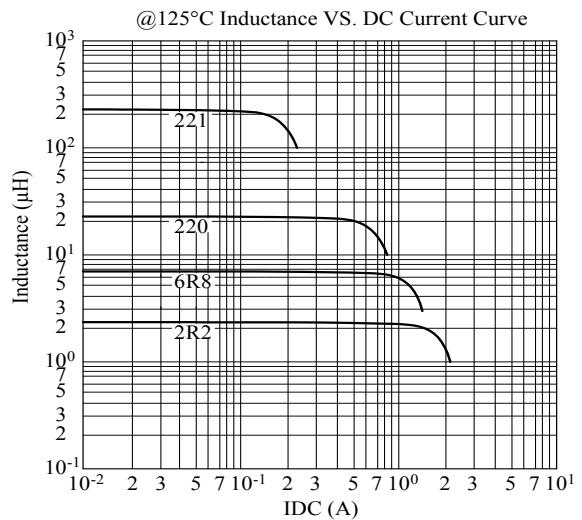
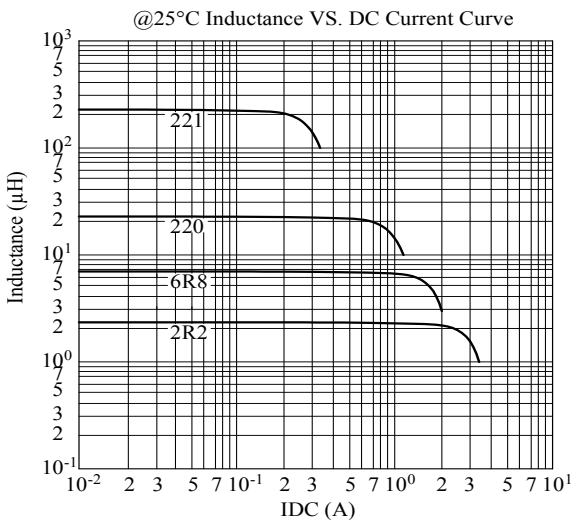
DWG. No.	Inductance (μH)	Q ref.	SRF (MHz) typ.	RDC (mΩ)		I _{rms} (A) typ.	I _{sat} (A) typ.
				typ.	max.		
ASU10652R8YFB-□□□	2.8±30%	15	60	15.0	19.0	6.50	7.50
ASU10654R2YFB-□□□	4.2±30%	14	45	18.0	23.0	5.60	7.00
ASU10656R5YFB-□□□	6.5±30%	13	28	28.0	35.0	5.00	5.30
ASU1065100YFB-□□□	10.0±30%	14	20	33.0	41.0	4.90	4.00
ASU1065220YFB-□□□	22.0±30%	16	12	58.0	73.0	3.80	2.80
ASU1065330YFB-□□□	33.0±30%	10	7	93.0	120.0	2.70	2.40
ASU1065470YFB-□□□	47.0±30%	10	6	165.0	210.0	2.10	2.10
ASU1065680YFB-□□□	68.0±30%	8	5	195.0	250.0	1.85	1.75
ASU1065101YFB-□□□	100.0±30%	13	4	234.0	290.0	1.80	1.40

1. Electrical specifications at 25°C
2. Inductance Test Freq.:100kHz / 0.1V
3. Q Test Freq.: 2R8~6R5--7.96MHz , 100~680--2.52MHz , 101--0.796MHz
4. I_{sat} base on ΔL / LOA=35% typ.
5. I_{rms} base on Temp. rise 40°C typ.

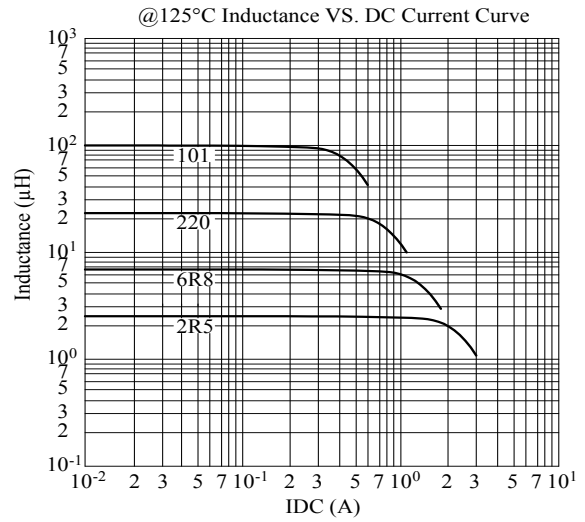
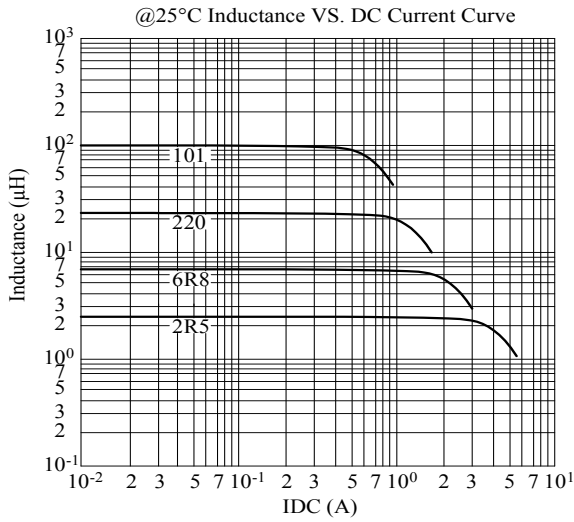
ASU5028 Series



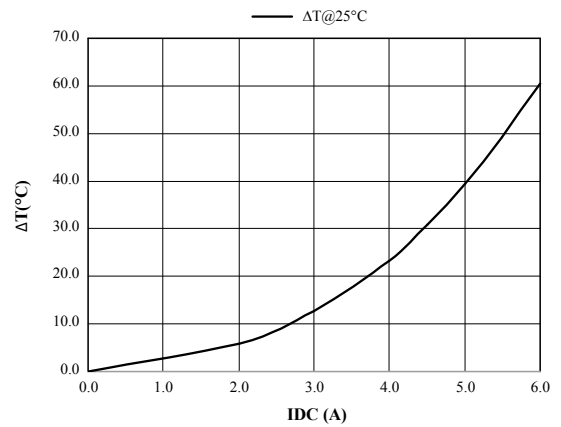
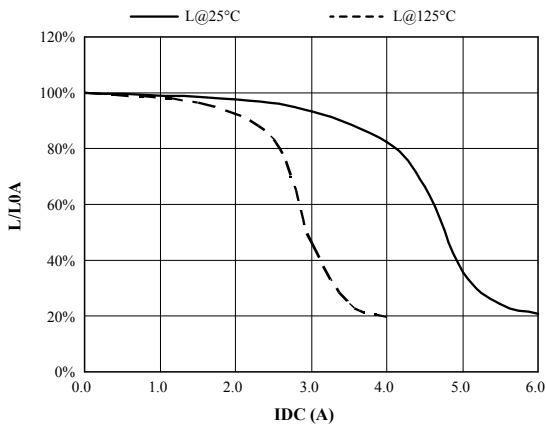
ASU6025 Series



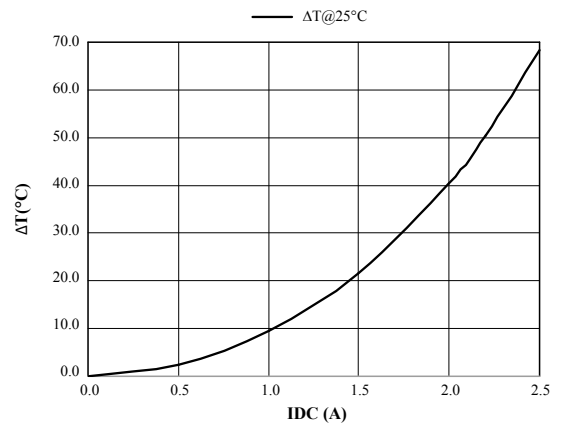
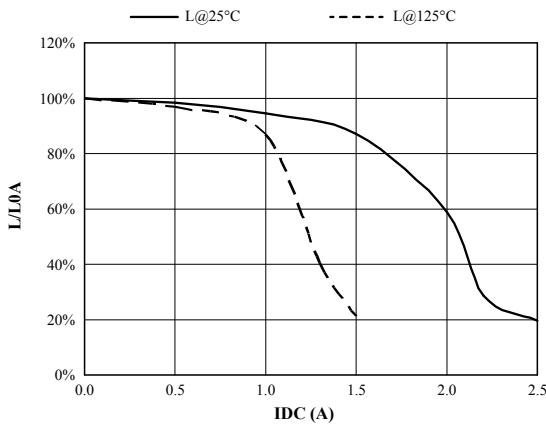
ASU8028 Series



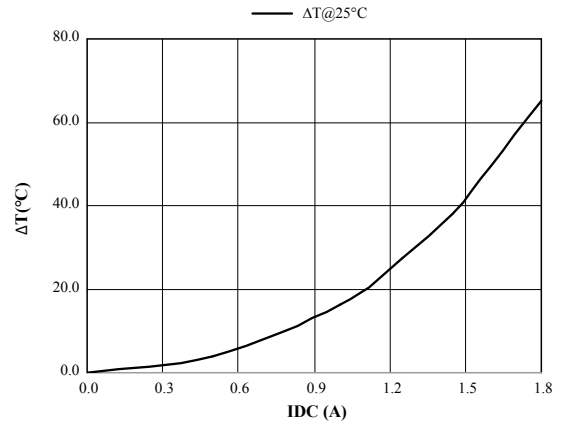
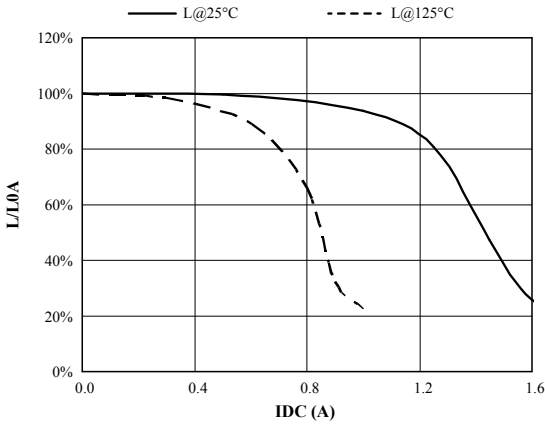
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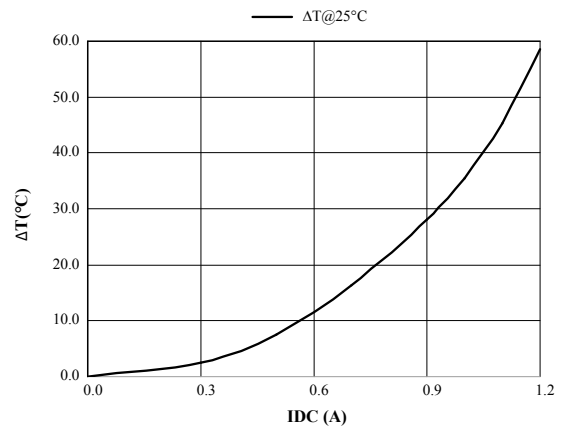
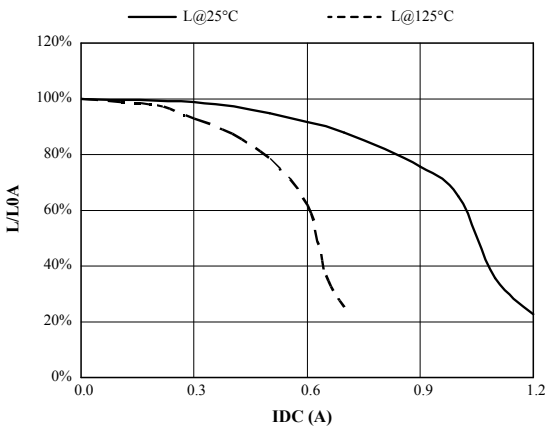
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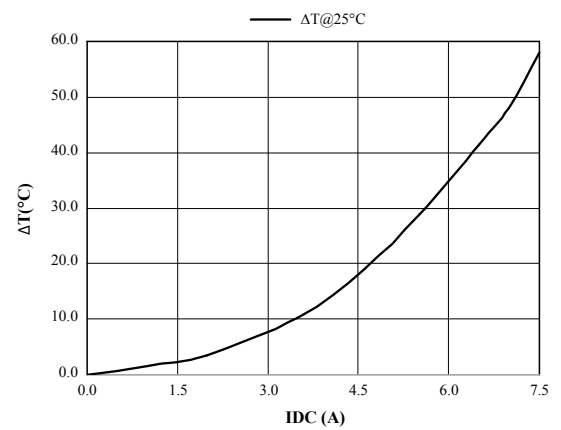
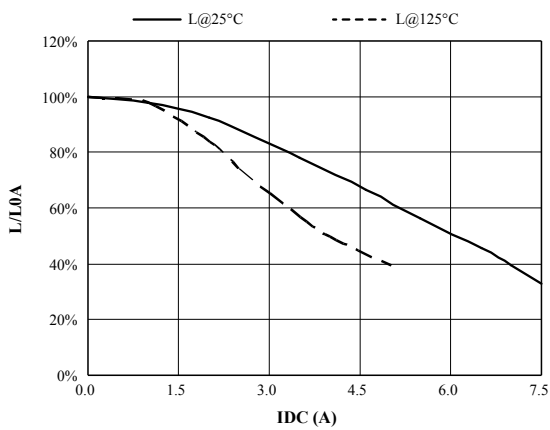
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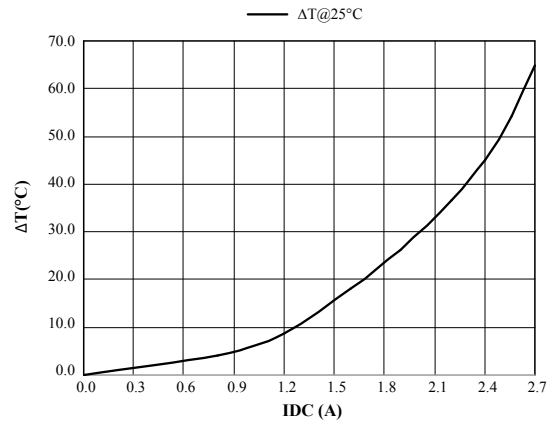
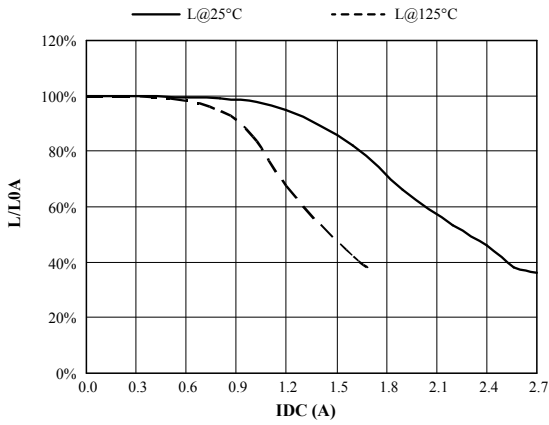
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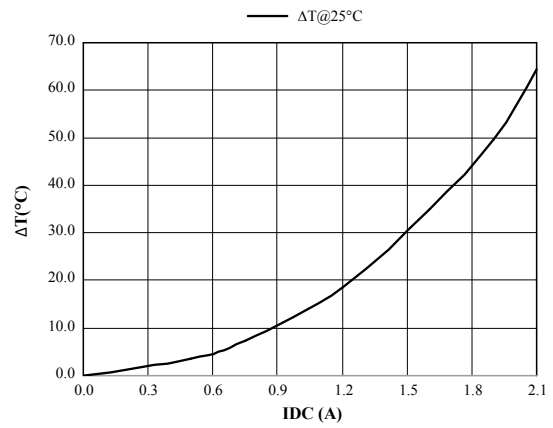
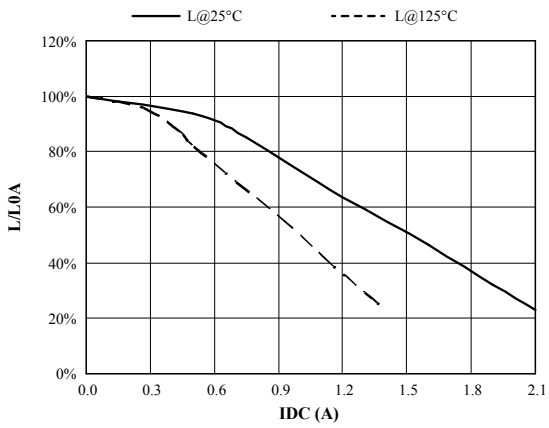
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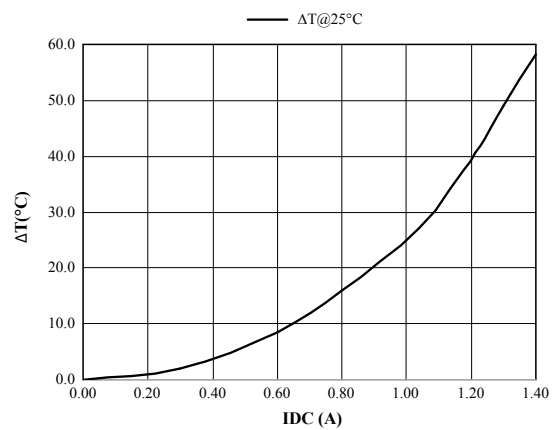
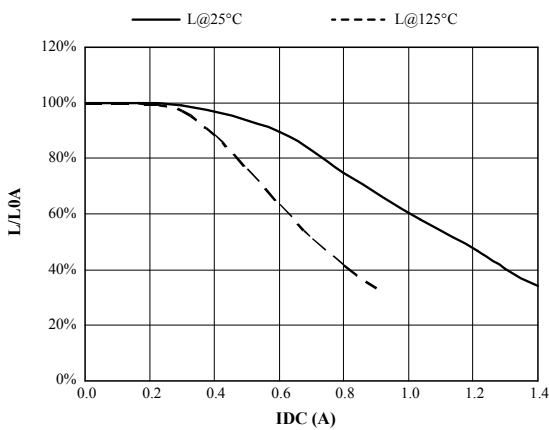
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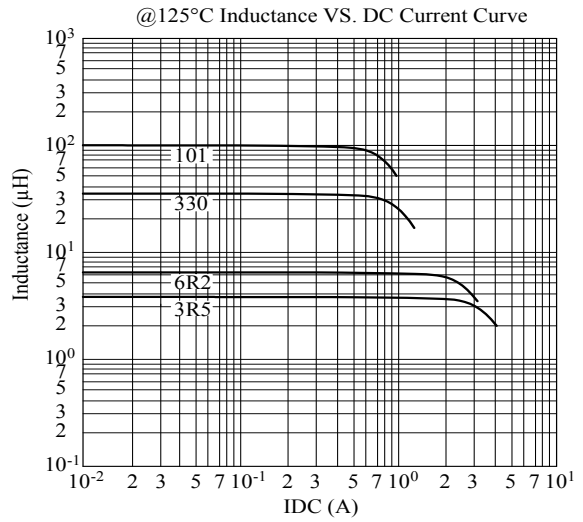
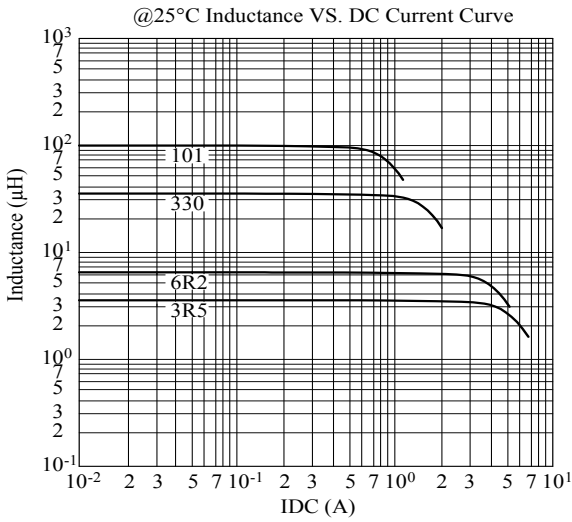
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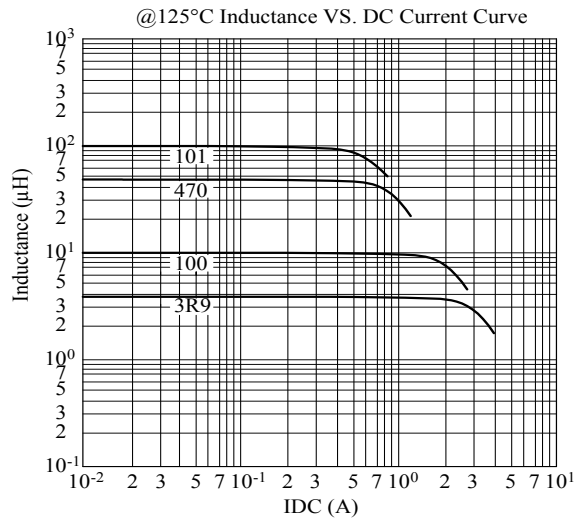
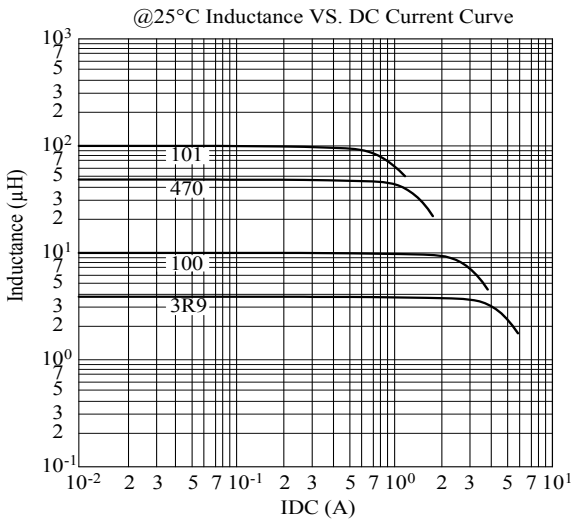
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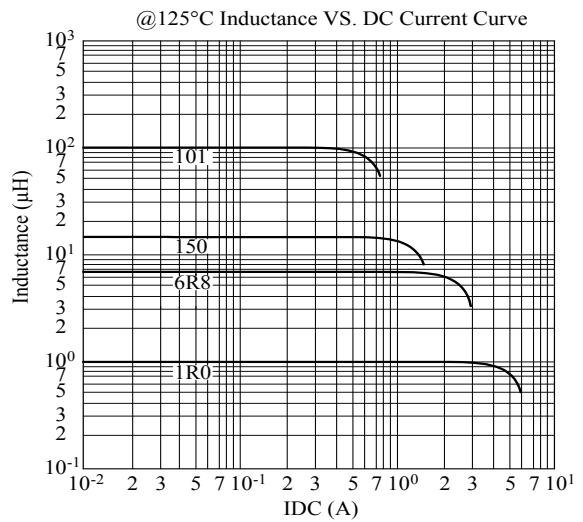
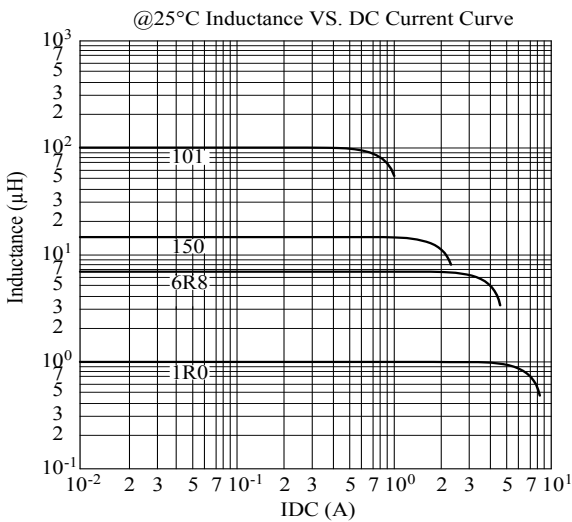
ASU8045 Series



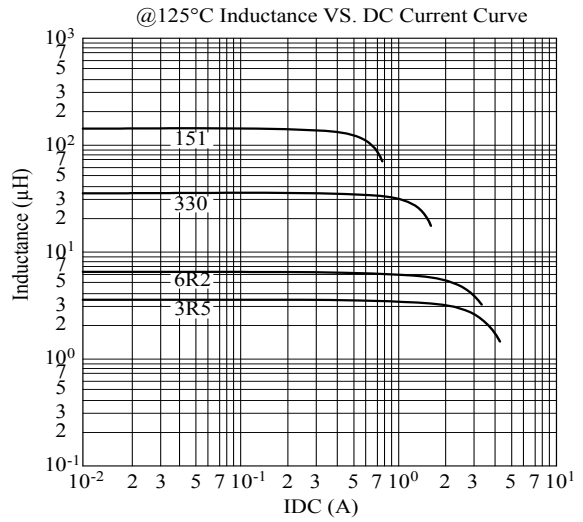
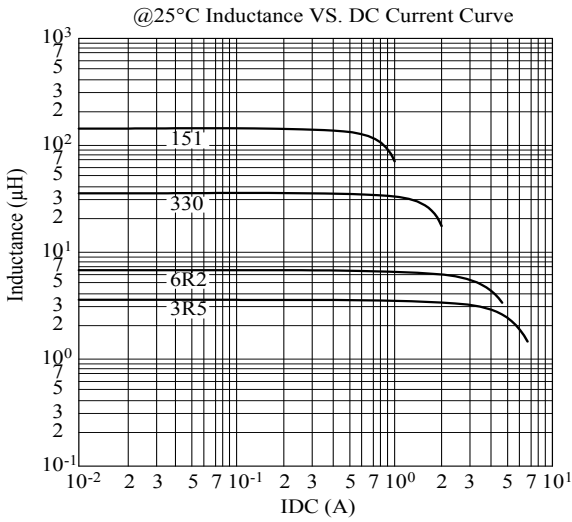
ASU8058 Series



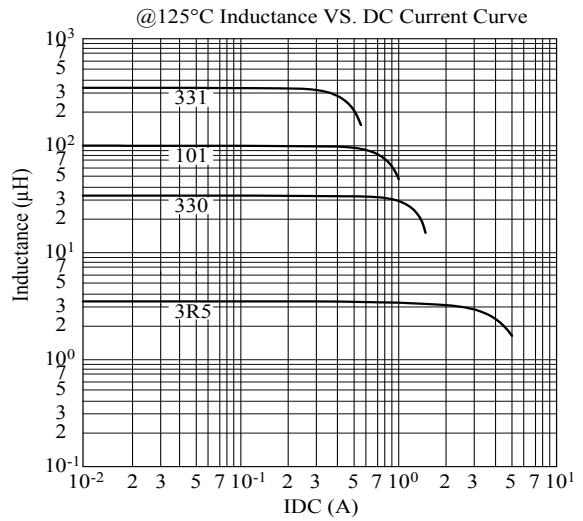
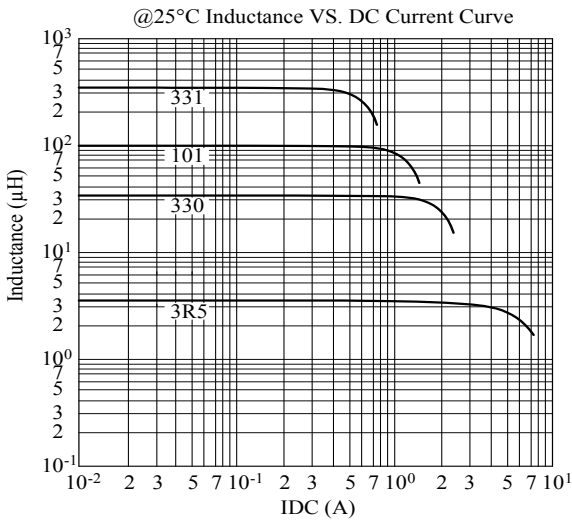
ASU1028 Series



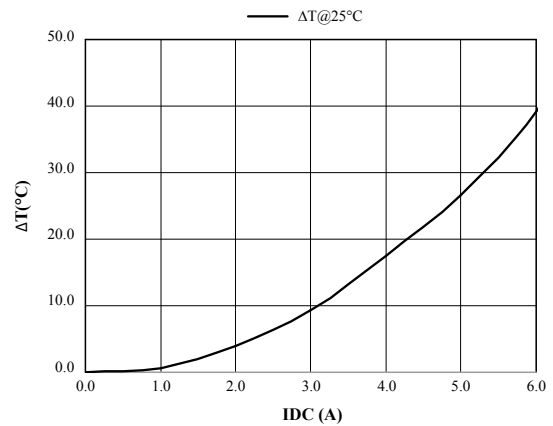
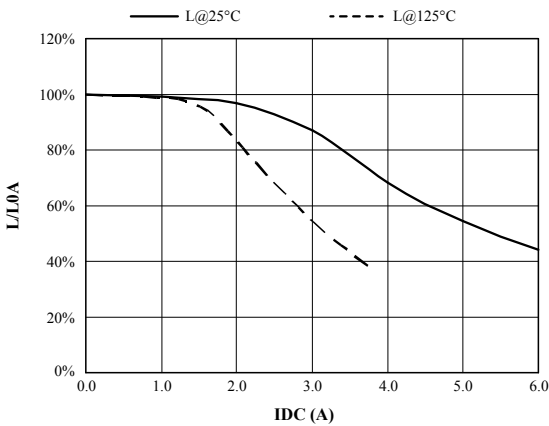
ASU1030 Series



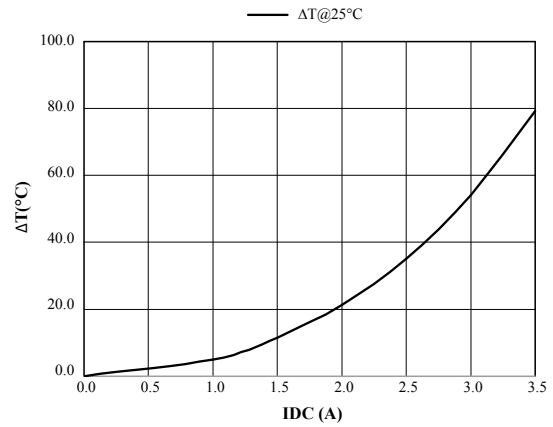
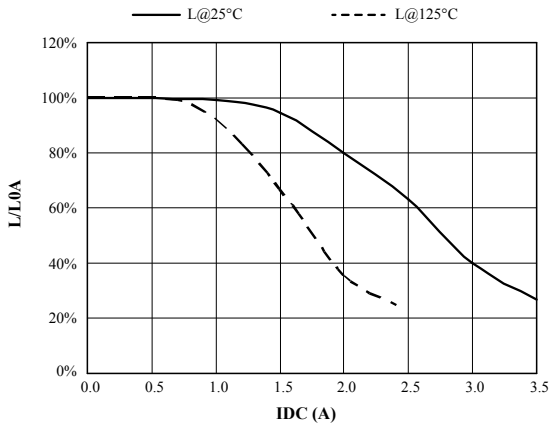
ASU1038 Series



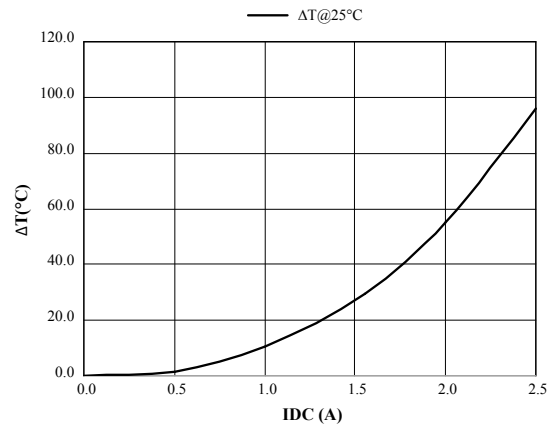
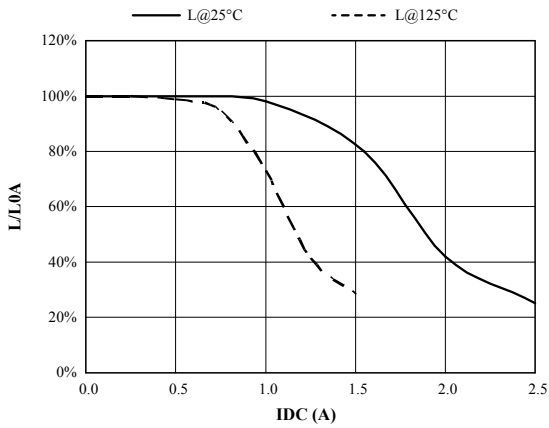
ASU10406R2YFB



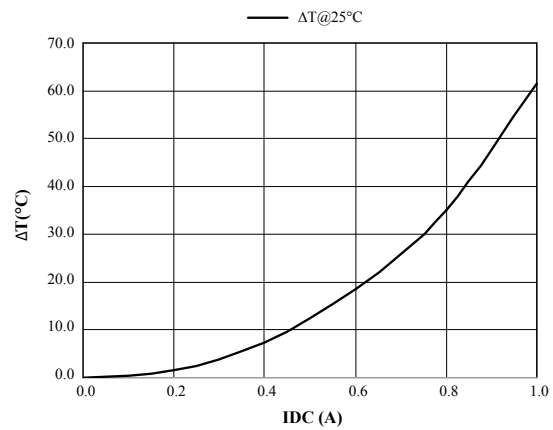
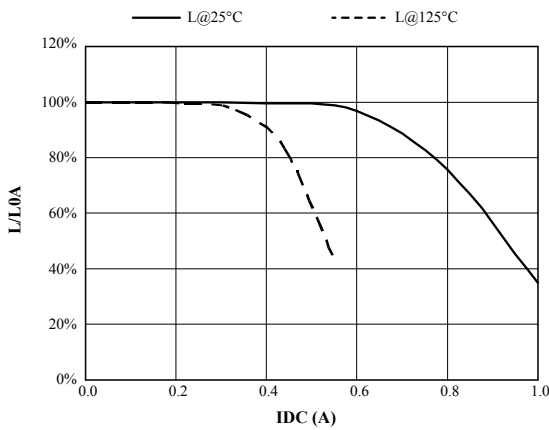
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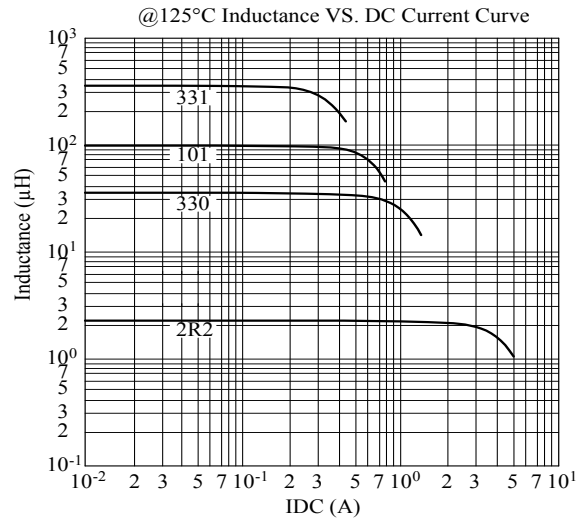
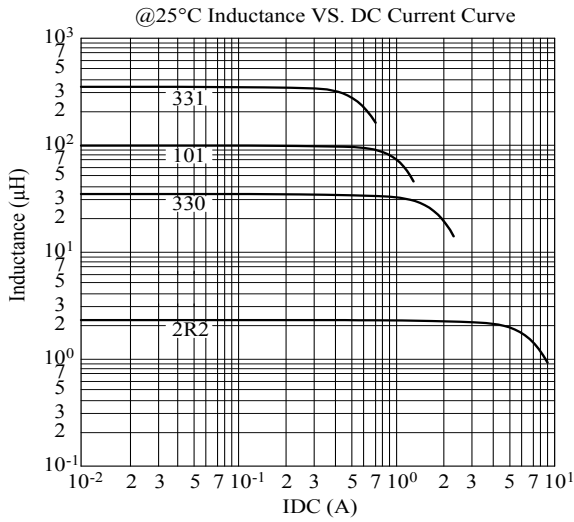
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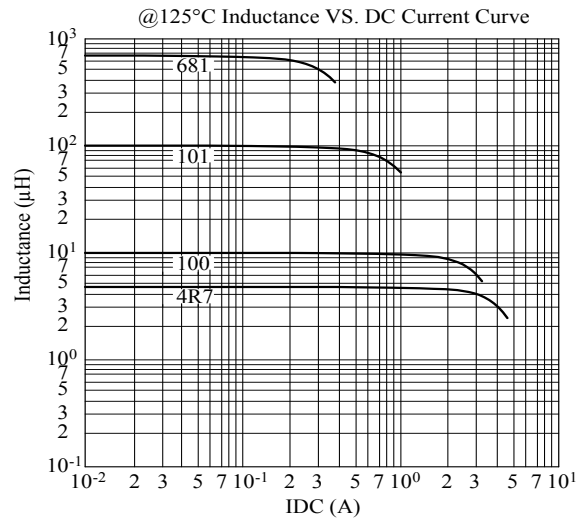
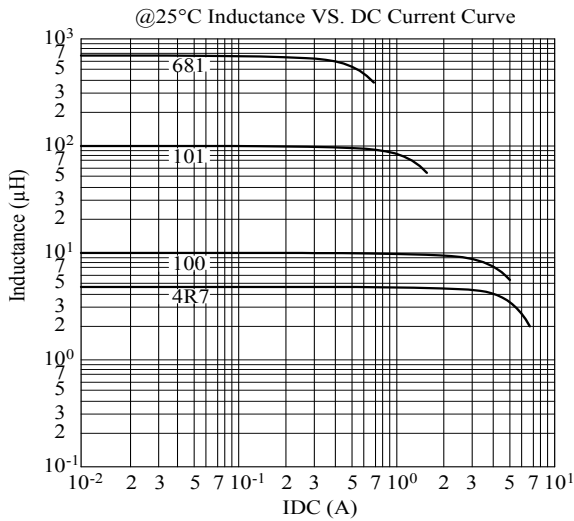
ASU1040221YFB



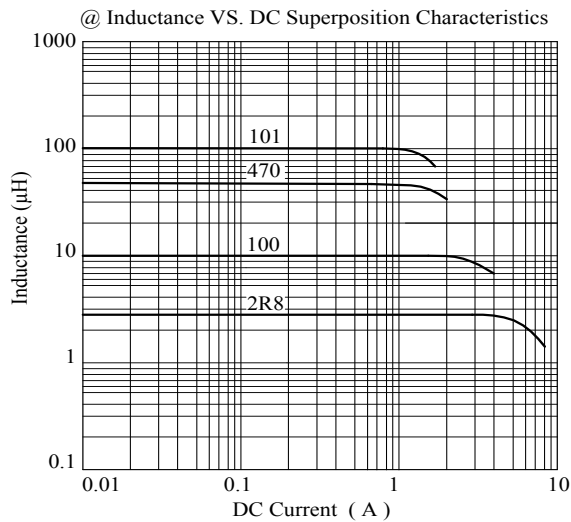
ASU1048 Series



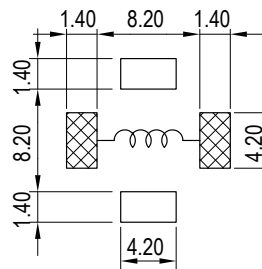
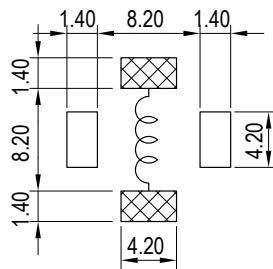
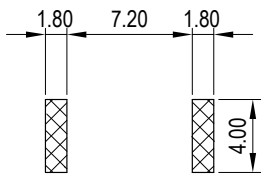
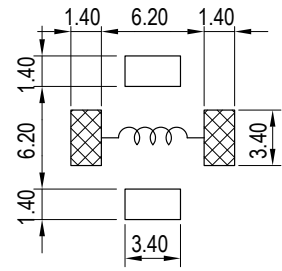
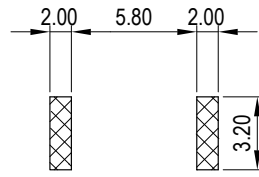
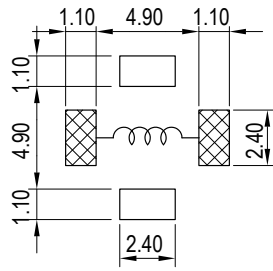
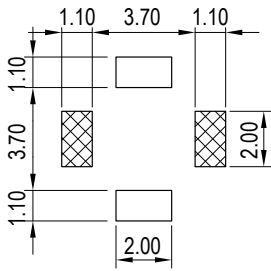
ASU1050 Series



ASU1065 Series



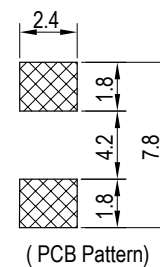
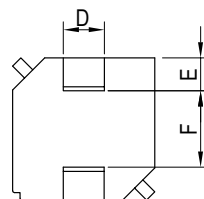
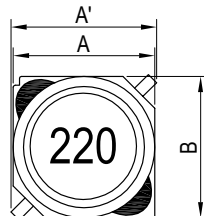
PCB Pattern



ASS
SERIES

7032

High Inductance



Unit: mm

Series	A	A'	B	C	D	E	F
ASS7032	7.00±0.30	7.45 max.	7.00±0.30	3.20±0.20	2.00 typ.	1.50 typ.	4.00 typ.

Features

- Magnetic shielding allows high-density mounting
- Glazing base termination offers excellent terminal strength
- Wide inductance from 1 to 1,000 μ H
- Excellent current handling capability
- AEC-Q200 Grade 1
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM

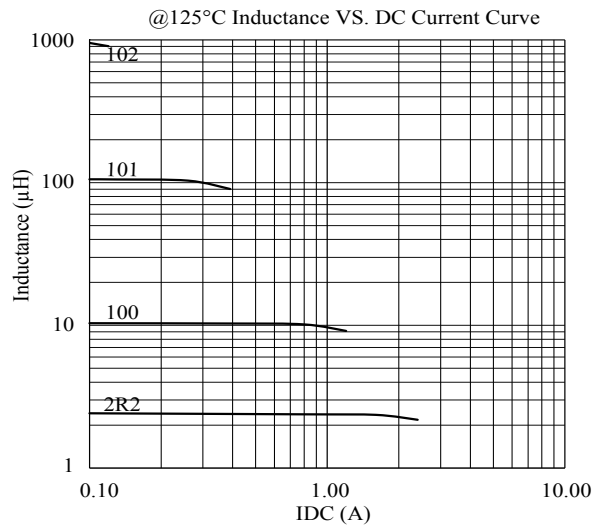
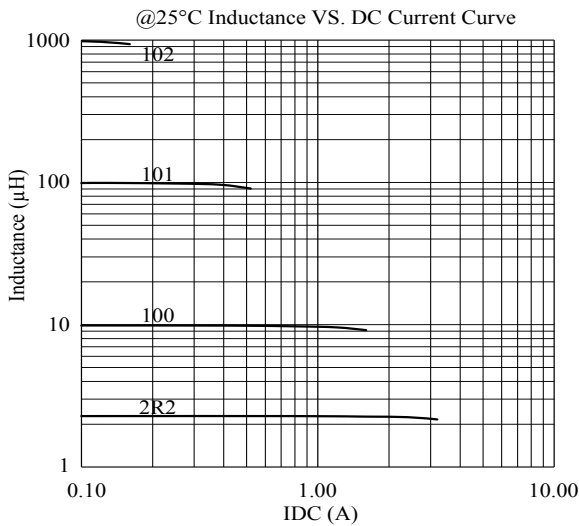


ASS7032 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (mΩ) max.	I _{rms} (A) typ.	I _{sat} (A) max.
ASS70322R2MSB-□□□	2.2±20%	12	7.96	70.0	0.022	2.60	2.65
ASS70323R3MSB-□□□	3.3±20%	16	7.96	55.0	0.027	2.20	2.40
ASS70324R7MSB-□□□	4.7±20%	16	7.96	43.0	0.042	2.00	2.00
ASS70326R8MSB-□□□	6.8±20%	17	7.96	37.0	0.054	1.80	1.60
ASS7032100MSB-□□□	10.0±20%	25	2.52	35.0	0.068	1.60	1.40
ASS7032150MSB-□□□	15.0±20%	22	2.52	32.0	0.095	1.20	1.10
ASS7032220MSB-□□□	22.0±20%	20	2.52	29.0	0.135	1.05	0.96
ASS7032330MSB-□□□	33.0±20%	23	2.52	20.0	0.200	0.86	0.76
ASS7032470MSB-□□□	47.0±20%	26	2.52	18.0	0.270	0.70	0.67
ASS7032680MSB-□□□	68.0±20%	22	2.52	16.0	0.380	0.67	0.60
ASS7032101MSB-□□□	100.0±20%	28	0.796	12.0	0.540	0.50	0.45
ASS7032151MSB-□□□	150.0±20%	35	0.796	10.0	0.800	0.38	0.37
ASS7032221MSB-□□□	220.0±20%	47	0.796	7.5	1.300	0.32	0.30
ASS7032331MSB-□□□	330.0±20%	46	0.796	6.1	1.900	0.24	0.22
ASS7032471MSB-□□□	470.0±20%	34	0.796	5.1	2.400	0.20	0.20
ASS7032681MSB-□□□	680.0±20%	58	0.796	3.8	3.750	0.15	0.16
ASS7032102MSB-□□□	1000.0±20%	70	0.252	3.1	5.400	0.14	0.15

1. Electrical specifications at 25°C
2. Inductance test condition 1kHz/0.5V
3. I_{sat} base on ΔL/L0A=10% typ.
4. I_{rms} base on Temp. rise 30°C max.

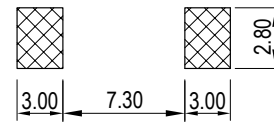
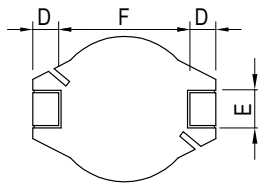
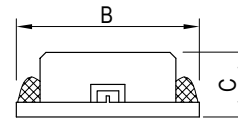
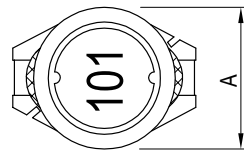
ASS7032 Series



ASS
SERIES

1005

High Inductance



(PCB Pattern)



Unit: mm

Series	A	B	C	D	E	F
ASS1005	10.00±0.30	12.70±0.30	4.90±0.30	2.40±0.20	2.20 ref.	7.60±0.30

Features

- Magnetic shielding allows high-density mounting
- Glazing base termination offers excellent terminal strength
- Wide inductance from 1 to 1,000 μ H
- Excellent current handling capability
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM

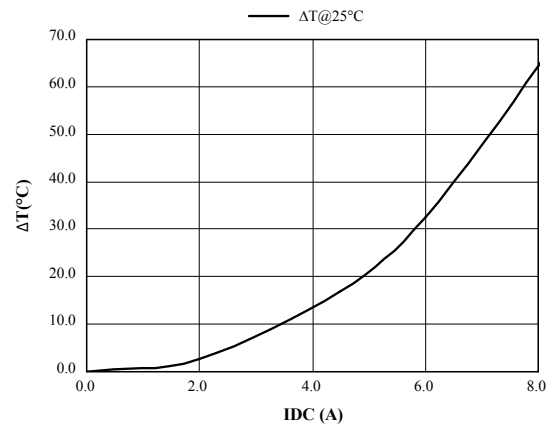
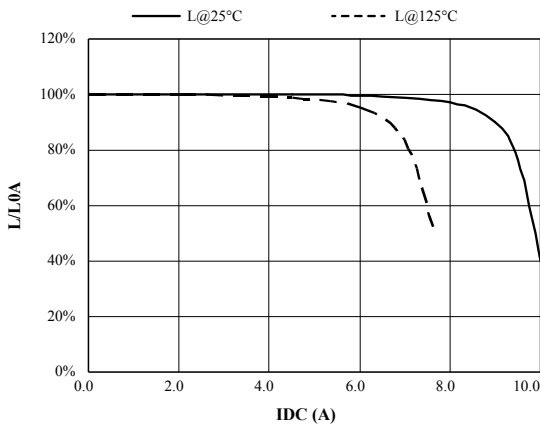


ASS1005 Series

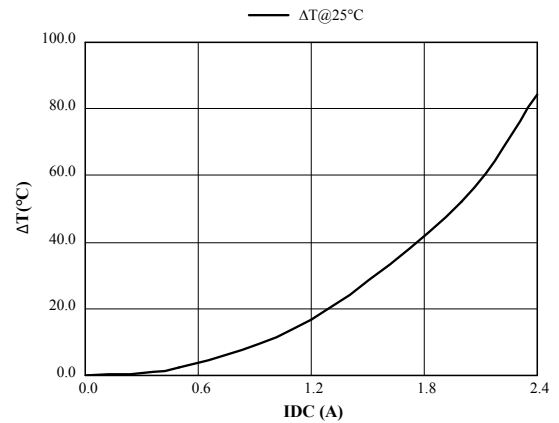
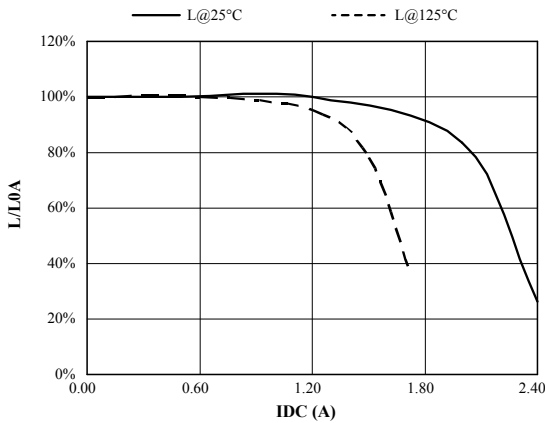
DWG. No.	Inductance (μ H)	Q ref.	Test Freq. (Hz)		SRF (MHz) nom.	RDC (Ω) max.	I _{rms} (mA) max.	I _{sat} (mA) max.
			L	Q				
ASS10051R0MLB-□□□	1.0 \pm 20%	25	1k/1V	7.960M	120.0	0.017	7.50	4.50
ASS10051R5MLB-□□□	1.5 \pm 20%	25	1k/1V	7.960M	100.0	0.020	6.10	3.60
ASS10052R2MLB-□□□	2.2 \pm 20%	25	1k/1V	7.960M	90.0	0.027	5.20	3.10
ASS10053R0MLB-□□□	3.0 \pm 20%	25	1k/1V	7.960M	80.0	0.030	4.50	2.90
ASS10054R7MLB-□□□	4.7 \pm 20%	25	1k/1V	7.960M	50.0	0.040	3.50	2.50
ASS10057R0MLB-□□□	7.0 \pm 20%	22	1k/1V	7.960M	32.0	0.055	2.90	2.20
ASS1005100MLB-□□□	10.0 \pm 20%	48	1k/1V	2.520M	30.0	0.065	2.50	2.00
ASS1005120MLB-□□□	12.0 \pm 20%	45	1k/1V	2.520M	25.0	0.080	2.20	1.80
ASS1005150MLB-□□□	15.0 \pm 20%	40	1k/1V	2.520M	20.0	0.085	2.00	1.70
ASS1005180YLB-□□□	18.0 \pm 15%	35	1k/1V	2.520M	19.0	0.090	1.80	1.60
ASS1005220YLB-□□□	22.0 \pm 15%	42	1k/1V	2.520M	18.0	0.100	1.60	1.40
ASS1005270YLB-□□□	27.0 \pm 15%	40	1k/1V	2.520M	17.0	0.120	1.50	1.30
ASS1005330YLB-□□□	33.0 \pm 15%	40	1k/1V	2.520M	15.0	0.160	1.30	1.20
ASS1005390YLB-□□□	39.0 \pm 15%	40	1k/1V	2.520M	13.0	0.180	1.20	1.05
ASS1005470YLB-□□□	47.0 \pm 15%	35	1k/1V	2.520M	12.0	0.190	1.10	1.00
ASS1005560YLB-□□□	56.0 \pm 15%	35	1k/1V	2.520M	11.0	0.210	1.00	0.90
ASS1005680YLB-□□□	68.0 \pm 15%	35	1k/1V	2.520M	9.0	0.340	0.92	0.82
ASS1005820YLB-□□□	82.0 \pm 15%	35	1k/1V	2.520M	8.0	0.380	0.85	0.75
ASS1005101KLB-□□□	100.0 \pm 10%	35	1k/1V	0.796M	7.5	0.420	0.78	0.68
ASS1005121KLB-□□□	120.0 \pm 10%	30	1k/1V	0.796M	7.2	0.460	0.70	0.60
ASS1005151KLB-□□□	150.0 \pm 10%	28	1k/1V	0.796M	6.2	0.520	0.63	0.55
ASS1005181KLB-□□□	180.0 \pm 10%	28	1k/1V	0.796M	5.8	0.700	0.58	0.50
ASS1005221KLB-□□□	220.0 \pm 10%	30	1k/1V	0.796M	5.2	0.800	0.51	0.45
ASS1005271KLB-□□□	270.0 \pm 10%	30	1k/1V	0.796M	4.8	1.100	0.46	0.40
ASS1005331KLB-□□□	330.0 \pm 10%	30	1k/1V	0.796M	4.5	1.200	0.42	0.35
ASS1005391KLB-□□□	390.0 \pm 10%	25	1k/1V	0.796M	4.2	1.400	0.38	0.33
ASS1005471KLB-□□□	470.0 \pm 10%	40	1k/1V	0.796M	3.0	1.600	0.36	0.30
ASS1005561KLB-□□□	560.0 \pm 10%	40	1k/1V	0.796M	2.7	1.800	0.32	0.28
ASS1005681KLB-□□□	680.0 \pm 10%	37	1k/1V	0.796M	2.6	2.300	0.29	0.26
ASS1005821KLB-□□□	820.0 \pm 10%	37	1k/1V	0.796M	2.5	2.600	0.26	0.24
ASS1005102KLB-□□□	1000.0 \pm 10%	65	1k/1V	0.252M	2.0	3.200	0.24	0.22
ASS1005122KLB-□□□	1200.0 \pm 10%	58	1k/1V	0.252M	2.0	3.600	0.22	0.20
ASS1005152KLB-□□□	1500.0 \pm 10%	53	1k/1V	0.252M	1.6	5.200	0.20	0.17
ASS1005182KLB-□□□	1800.0 \pm 10%	65	1k/1V	0.252M	1.4	5.700	0.18	0.16
ASS1005222KLB-□□□	2200.0 \pm 10%	55	1k/1V	0.252M	1.4	6.500	0.16	0.14
ASS1005272KLB-□□□	2700.0 \pm 10%	55	1k/1V	0.252M	1.2	8.600	0.14	0.12
ASS1005332KLB-□□□	3300.0 \pm 10%	50	1k/1V	0.252M	1.2	10.000	0.13	0.10

1. Electrical specifications at 25°C
2. I_{rms} base on Temp. rise 40°C max.
3. I_{sat} base on Δ L/LOA=10% max.

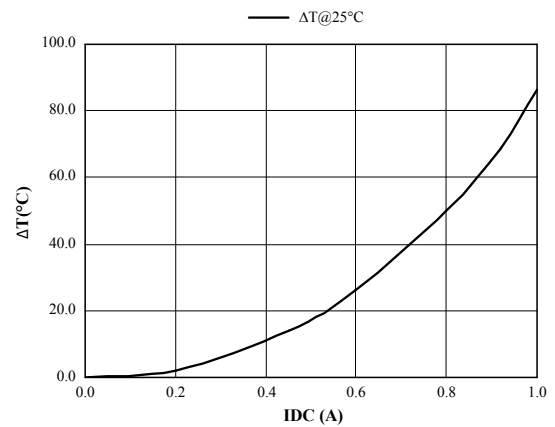
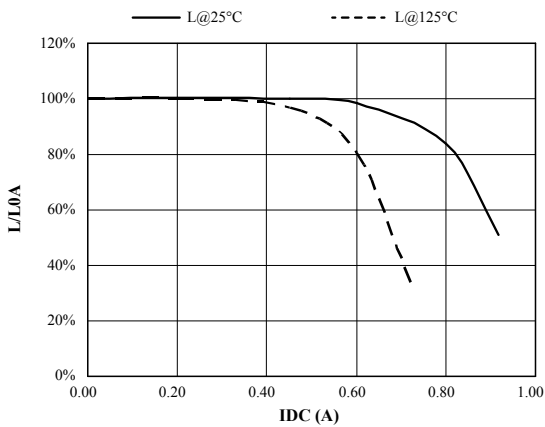
ASS10051R0MLB



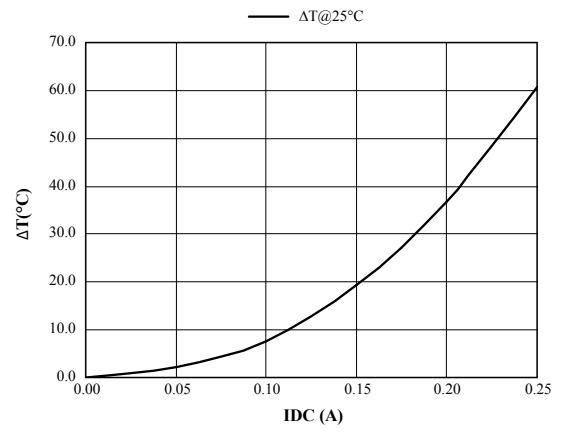
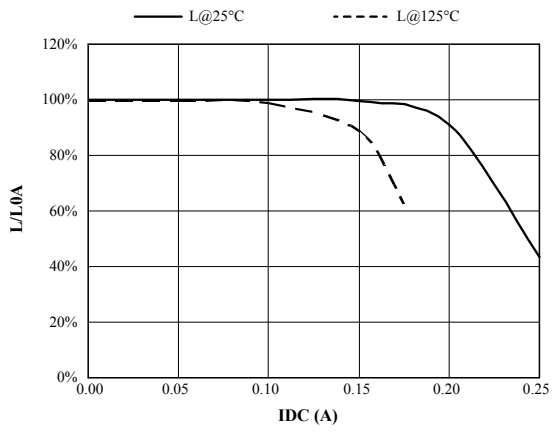
ASS1005330KLB



ASS1005221KLB



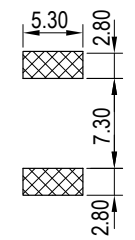
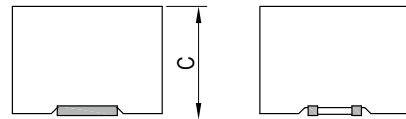
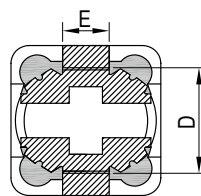
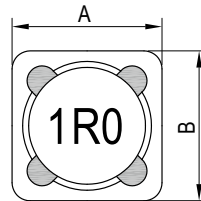
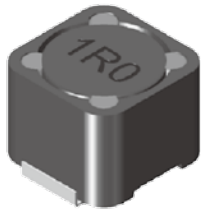
ASS1005332KLB



ASS
SERIES

1210

High Inductance



(PCB Pattern)

Unit: mm

Series	A	B	C	D	F
ASS1210	12.0±0.50	12.0±0.50	10.0 max.	7.90 ref.	4.90 ref.

Features

- Magnetic shielding allows high-density mounting
- Glazing base termination offers excellent terminal strength
- Wide inductance from 1 to 1,000 μ H
- Excellent current handling capability
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM

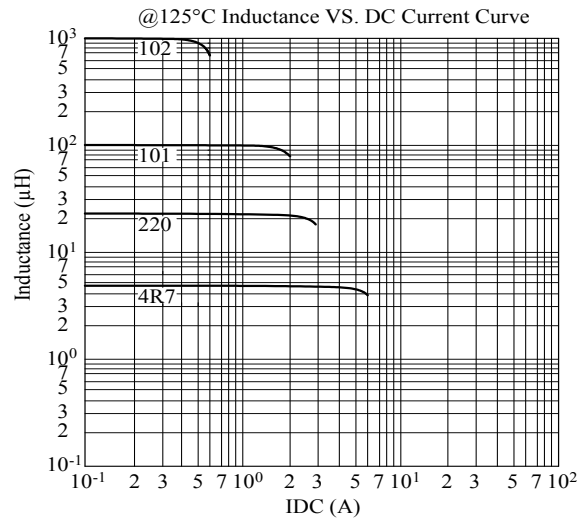
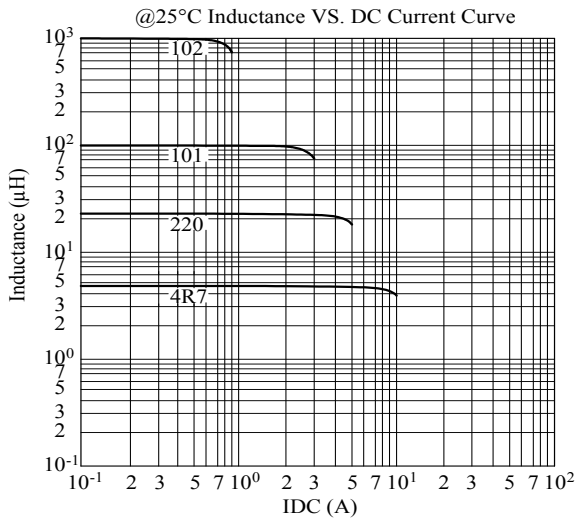


ASS1210 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (mΩ) max.	I _{rms} (A) typ.	I _{sat} (A) max.
ASS12101R0YFB-□□□	1.0±30%	10	7.960	85.00	6.0	11.00	16.50
ASS12101R8YFB-□□□	1.8±30%	10	7.960	56.00	7.5	10.20	13.20
ASS12102R2YFB-□□□	2.2±30%	10	7.960	54.00	9.0	9.50	12.20
ASS12103R3YFB-□□□	3.3±30%	15	7.960	44.00	10.0	9.00	10.50
ASS12104R7YFB-□□□	4.7±30%	8	7.960	35.00	12.0	8.50	9.60
ASS12105R6YFB-□□□	5.6±30%	12	7.960	28.00	13.5	8.00	8.50
ASS12106R8YFB-□□□	6.8±30%	12	7.960	20.00	15.0	7.85	8.30
ASS12108R2YFB-□□□	8.2±30%	11	7.960	16.00	17.0	7.25	7.55
ASS1210100MFB-□□□	10.0±20%	16	2.520	12.00	18.0	6.50	6.50
ASS1210120MFB-□□□	12.0±20%	14	2.520	18.00	22.0	6.30	6.10
ASS1210150MFB-□□□	15.0±20%	16	2.520	10.50	32.0	5.80	5.30
ASS1210180MFB-□□□	18.0±20%	13	2.520	8.00	35.0	5.50	5.10
ASS1210220MFB-□□□	22.0±20%	16	2.520	8.00	38.0	5.20	4.50
ASS1210270MFB-□□□	27.0±20%	16	2.520	6.50	40.0	5.00	4.20
ASS1210330MFB-□□□	33.0±20%	16	2.520	6.50	52.0	4.40	3.70
ASS1210390MFB-□□□	39.0±20%	16	2.520	4.50	66.0	4.20	3.50
ASS1210470MFB-□□□	47.0±20%	16	2.520	4.50	72.0	3.80	3.10
ASS1210560MFB-□□□	56.0±20%	8	2.520	4.00	90.0	3.40	2.90
ASS1210680MFB-□□□	68.0±20%	12	2.520	3.80	102.0	3.00	2.70
ASS1210820MFB-□□□	82.0±20%	15	2.520	3.50	112.0	2.80	2.50
ASS1210101MFB-□□□	100.0±20%	16	0.796	3.00	135.0	2.50	2.20
ASS1210121MFB-□□□	120.0±20%	13	0.796	2.60	170.0	2.30	1.90
ASS1210151MFB-□□□	150.0±20%	12	0.796	2.20	190.0	2.20	1.80
ASS1210181MFB-□□□	180.0±20%	14	0.796	1.80	250.0	1.90	1.60
ASS1210221MFB-□□□	220.0±20%	15	0.796	1.80	315.0	1.70	1.50
ASS1210271MFB-□□□	270.0±20%	16	0.796	1.80	410.0	1.50	1.30
ASS1210331MFB-□□□	330.0±20%	14	0.796	1.80	450.0	1.40	1.20
ASS1210391MFB-□□□	390.0±20%	16	0.796	1.30	600.0	1.30	1.10
ASS1210471MFB-□□□	470.0±20%	12	0.796	0.85	820.0	1.20	1.00
ASS1210561MFB-□□□	560.0±20%	12	0.796	0.85	900.0	1.10	0.95
ASS1210681MFB-□□□	680.0±20%	11	0.796	0.85	1200.0	1.00	0.85
ASS1210821MFB-□□□	820.0±20%	6	0.796	0.85	1320.0	0.85	0.75
ASS1210102MFB-□□□	1000.0±20%	22	0.796	0.85	1650.0	0.75	0.70

1. Electrical specifications at 25°C
2. Inductance Test Freq.: 1kHz/0.25V
3. I_{rms} base on Temp. rise 40°C max.
4. I_{sat} base on ΔL/L0A=20% typ.

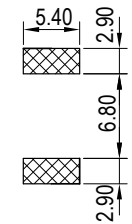
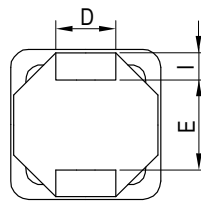
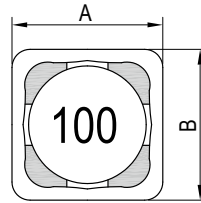
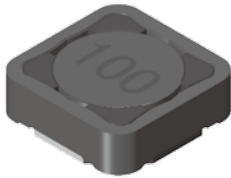
ASS1210 Series



ASS
SERIES

1240 / 1260 / MSS1280

High Inductance



(PCB Pattern)

Unit: mm

Series	A	B	C	D	E	I
ASS1240	12.5±0.30	12.5±0.30	4.00±0.50	5.00±0.30	7.00 typ.	2.50±0.15
ASS1260	12.5±0.30	12.5±0.30	6.00±0.50	5.00±0.30	7.00 typ.	2.50±0.15
MSS1280	12.5±0.30	12.5±0.30	7.50±0.50	5.00±0.30	7.00 typ.	2.50±0.15

Features

- Magnetic shielding allows high-density mounting
- Glazing base termination offers excellent terminal strength
- Wide inductance from 1 to 1,000 μ H
- Excellent current handling capability
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM



ASS1240 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (mΩ) max.	I _{rms} (A)	I _{sat} (A)
ASS1240100MLB-□□□	10.0±20%	17	2.520	27.0	32.0	4.00	4.00
ASS1240120MLB-□□□	12.0±20%	16	2.520	25.0	38.0	3.80	3.60
ASS1240150MLB-□□□	15.0±20%	16	2.520	22.0	47.0	3.50	3.20
ASS1240180MLB-□□□	18.0±20%	14	2.520	20.0	55.0	3.20	3.00
ASS1240220MLB-□□□	22.0±20%	18	2.520	16.0	67.5	3.00	2.60
ASS1240270MLB-□□□	27.0±20%	16	2.520	15.5	85.0	2.55	2.35
ASS1240330MLB-□□□	33.0±20%	19	2.520	15.0	97.0	2.30	2.10
ASS1240390MLB-□□□	39.0±20%	14	2.520	14.0	120.0	2.15	2.00
ASS1240470MLB-□□□	47.0±20%	19	2.520	13.0	135.0	2.00	1.80
ASS1240560MLB-□□□	56.0±20%	16	2.520	12.0	170.0	1.80	1.65
ASS1240680MLB-□□□	68.0±20%	19	2.520	11.0	200.0	1.50	1.50
ASS1240820MLB-□□□	82.0±20%	16	2.520	10.0	250.0	1.35	1.35
ASS1240101MLB-□□□	100.0±20%	14	0.796	8.0	300.0	1.25	1.20
ASS1240121KLB-□□□	120.0±10%	12	0.796	7.8	370.0	1.20	1.15
ASS1240151KLB-□□□	150.0±10%	12	0.796	7.5	440.0	1.10	1.05
ASS1240181KLB-□□□	180.0±10%	12	0.796	7.0	550.0	0.98	0.95
ASS1240221KLB-□□□	220.0±10%	12	0.796	6.6	600.0	0.92	0.90
ASS1240271KLB-□□□	270.0±10%	10	0.796	6.0	780.0	0.80	0.80
ASS1240331KLB-□□□	330.0±10%	12	0.796	5.5	950.0	0.75	0.75
ASS1240391KLB-□□□	390.0±10%	12	0.796	5.0	1150.0	0.70	0.65
ASS1240471KLB-□□□	470.0±10%	12	0.796	4.5	1350.0	0.62	0.60
ASS1240561KLB-□□□	560.0±10%	12	0.796	4.0	1500.0	0.55	0.52
ASS1240681KLB-□□□	680.0±10%	14	0.796	3.8	2000.0	0.50	0.48
ASS1240821KLB-□□□	820.0±10%	10	0.796	3.5	2400.0	0.45	0.42
ASS1240102KLB-□□□	1000.0±10%	16	0.252	2.8	3000.0	0.42	0.40

1. Electrical specifications at 25°C
2. Inductance Test Freq.: 100kHz / 0.1V
3. I_{rms} base on Temp. rise 40°C typ.
4. I_{sat} base on ΔL/L0A=25% typ.

ASS1260 Series

DWG. No.	Inductance (μH)	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (mΩ) max.	I _{rms} (A)	I _{sat} (A)
ASS12601R0YFB-□□□	1.0±30%	26	7.96	100.00	7.8	9.40	10.00
ASS12601R2YFB-□□□	1.2±30%	18	7.96	91.10	8.0	9.20	9.80
ASS12601R5YFB-□□□	1.5±30%	24	7.96	86.00	9.5	8.80	9.00
ASS12602R2YFB-□□□	2.2±30%	22	7.96	70.00	10.5	8.20	8.50
ASS12602R4YFB-□□□	2.4±30%	18	7.96	63.80	11.5	7.80	8.00
ASS12603R3YFB-□□□	3.3±30%	20	7.96	40.00	12.0	7.60	7.80
ASS12603R5YFB-□□□	3.5±30%	22	7.96	37.60	13.0	7.50	7.60
ASS12604R7YFB-□□□	4.7±30%	19	7.96	36.70	15.5	6.80	7.00
ASS12605R6YFB-□□□	5.6±30%	19	7.96	33.00	16.2	6.70	6.90
ASS12606R1YFB-□□□	6.1±30%	21	7.96	29.80	17.0	6.60	6.80
ASS12606R8YFB-□□□	6.8±30%	20	7.96	28.20	18.0	6.30	6.50
ASS12607R6YFB-□□□	7.6±30%	16	7.96	27.90	19.0	6.00	6.20
ASS12608R2YFB-□□□	8.2±30%	18	7.96	24.00	19.5	5.70	5.80
ASS1260100MFB-□□□	10.0±20%	32	2.52	21.00	20.0	5.50	5.50
ASS1260120MFB-□□□	12.0±20%	27	2.52	19.40	23.0	5.20	5.00
ASS1260150MFB-□□□	15.0±20%	25	2.52	17.60	27.0	5.00	4.60
ASS1260180MFB-□□□	18.0±20%	28	2.52	15.50	36.0	4.20	3.90
ASS1260220MFB-□□□	22.0±20%	29	2.52	13.40	43.0	4.00	3.70
ASS1260270MFB-□□□	27.0±20%	26	2.52	12.70	45.0	3.60	3.30
ASS1260330MFB-□□□	33.0±20%	27	2.52	9.97	60.0	3.00	2.80
ASS1260390MFB-□□□	39.0±20%	22	2.52	10.40	70.0	2.80	2.70
ASS1260470MFB-□□□	47.0±20%	22	2.52	7.63	86.0	2.60	2.50
ASS1260560MFB-□□□	56.0±20%	24	2.52	7.92	100.0	2.30	2.20
ASS1260680MFB-□□□	68.0±20%	22	2.52	7.43	110.0	2.10	2.10
ASS1260820MFB-□□□	82.0±20%	25	2.52	6.85	145.0	1.95	1.90
ASS1260101MFB-□□□	100.0±20%	26	0.796	6.07	180.0	1.70	1.70
ASS1260121KFB-□□□	120.0±10%	26	0.796	5.50	210.0	1.65	1.65
ASS1260151KFB-□□□	150.0±10%	20	0.796	5.00	260.0	1.55	1.55
ASS1260181KFB-□□□	180.0±10%	26	0.796	4.50	320.0	1.40	1.40
ASS1260221KFB-□□□	220.0±10%	22	0.796	4.20	380.0	1.38	1.30
ASS1260271KFB-□□□	270.0±10%	20	0.796	3.60	450.0	1.30	1.20
ASS1260331KFB-□□□	330.0±10%	22	0.796	3.20	580.0	1.15	1.10
ASS1260391KFB-□□□	390.0±10%	20	0.796	2.80	700.0	1.08	1.00
ASS1260471KFB-□□□	470.0±10%	18	0.796	2.60	820.0	0.95	0.90
ASS1260561KFB-□□□	560.0±10%	22	0.796	2.40	1000.0	0.88	0.80
ASS1260681KFB-□□□	680.0±10%	18	0.796	2.20	1150.0	0.80	0.75
ASS1260821KFB-□□□	820.0±10%	20	0.796	2.00	1500.0	0.73	0.63
ASS1260102KFB-□□□	1000.0±10%	30	0.252	1.80	1700.0	0.68	0.60

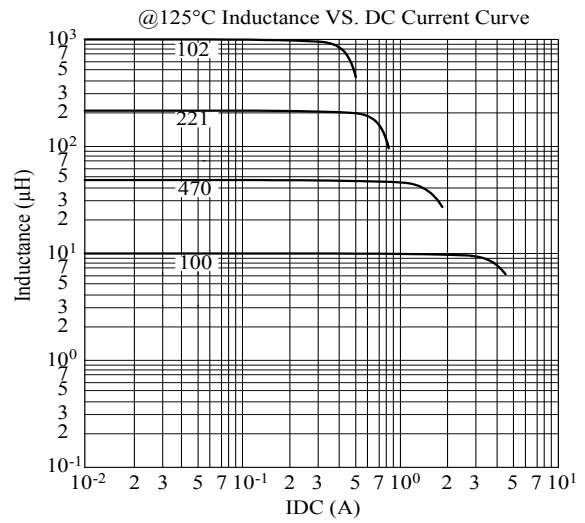
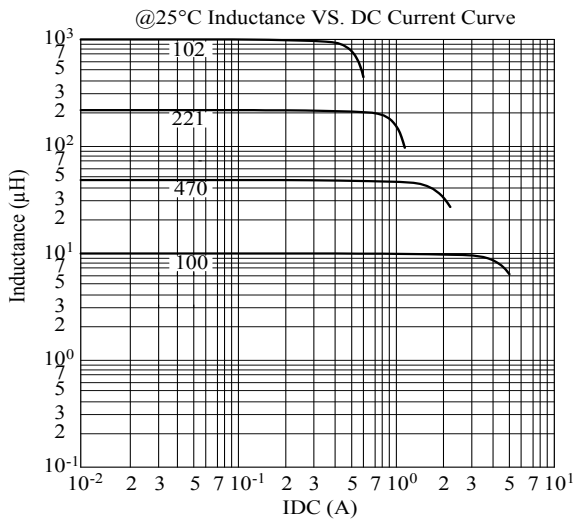
1. Electrical specifications at 25°C
2. L Test Freq.: 100kHz / 0.1V (1R0Y~8R2Y), 1kHz / 1V (100M~102K)
3. I_{rms} base on Temp. rise 40°C typ.
4. I_{sat} base on ΔL/LOA=25% typ.

MSS1280 Series

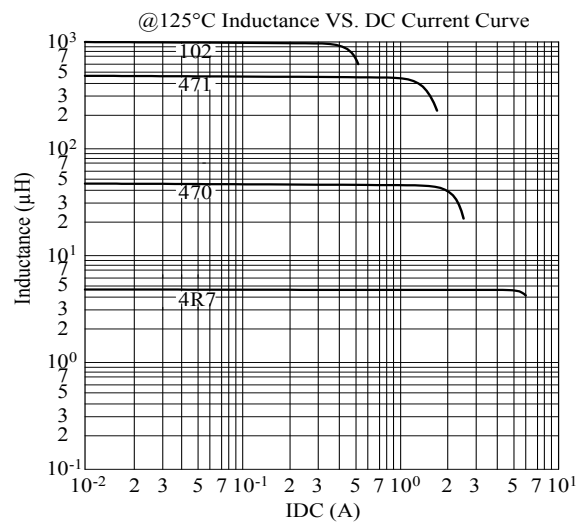
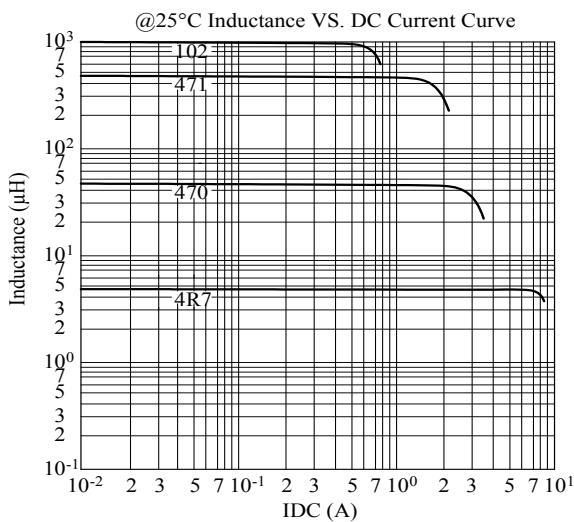
DWG. No.	Inductance (μH)	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC (mΩ) max.	I _{rms} (A)	I _{sat} (A)
MSS12802R4YFB-□□□	2.4±30%	30	7.96	36	10.0	9.20	12.00
MSS12803R9YFB-□□□	3.9±30%	28	7.96	34	14.0	8.40	10.50
MSS12804R7YFB-□□□	4.7±30%	22	7.96	30	15.5	8.20	8.80
MSS12806R8YFB-□□□	6.8±30%	20	7.96	22	18.5	7.60	8.00
MSS12808R2YFB-□□□	8.2±30%	22	2.52	20	20.5	6.20	6.80
MSS1280100MFB-□□□	10.0±20%	24	2.52	17	19.5	6.00	6.60
MSS1280120MFB-□□□	12.0±20%	26	2.52	15	28.0	5.60	6.30
MSS1280150MFB-□□□	15.0±20%	26	2.52	13	28.5	5.20	5.00
MSS1280180MFB-□□□	18.0±20%	24	2.52	12	35.0	4.80	4.60
MSS1280220MFB-□□□	22.0±20%	20	2.52	11	38.6	4.30	4.10
MSS1280270MFB-□□□	27.0±20%	26	2.52	10	52.0	3.90	3.70
MSS1280330MFB-□□□	33.0±20%	28	2.52	9.5	57.0	3.50	3.30
MSS1280390MFB-□□□	39.0±20%	24	2.52	8.5	70.0	3.20	3.10
MSS1280470MFB-□□□	47.0±20%	24	2.52	7.5	80.0	2.90	2.80
MSS1280560MFB-□□□	56.0±20%	24	2.52	7.0	100.0	2.60	2.50
MSS1280680MFB-□□□	68.0±20%	20	2.52	6.5	120.0	2.40	2.30
MSS1280820MFB-□□□	82.0±20%	20	2.52	5.0	130.0	2.30	2.20
MSS1280101MFB-□□□	100.0±20%	18	0.796	4.5	150.0	2.10	2.00
MSS1280121KFB-□□□	120.0±10%	16	0.796	4.3	200.0	1.95	1.95
MSS1280151KFB-□□□	150.0±10%	24	0.796	4.1	270.0	1.85	1.90
MSS1280181KFB-□□□	180.0±10%	24	0.796	4.0	300.0	1.75	1.88
MSS1280221KFB-□□□	220.0±10%	24	0.796	3.4	400.0	1.60	1.70
MSS1280271KFB-□□□	270.0±10%	20	0.796	3.1	450.0	1.20	1.60
MSS1280331KFB-□□□	330.0±10%	18	0.796	2.9	600.0	1.10	1.40
MSS1280391KFB-□□□	390.0±10%	20	0.796	2.7	680.0	1.00	1.40
MSS1280471KFB-□□□	470.0±10%	20	0.796	2.2	880.0	0.90	1.25
MSS1280561KFB-□□□	560.0±10%	20	0.796	2.0	960.0	0.80	1.15
MSS1280681KFB-□□□	680.0±10%	26	0.796	1.7	1300.0	0.75	0.97
MSS1280821KFB-□□□	820.0±10%	20	0.796	1.4	1500.0	0.70	0.94
MSS1280102KFB-□□□	1000.0±10%	40	0.252	1.3	1700.0	0.68	0.80
MSS1280122KFB-□□□	1200.0±10%	40	0.252	1.1	2200.0	0.55	0.65

1. Electrical specifications at 25°C
2. L Test Freq.: 2R4~8R2 : 100kHz / 1V , 100~122 : 1kHz / 1V
3. I_{rms} base on Temp. rise 40°C typ.
4. I_{sat} base on ΔL/L0A=25% typ.

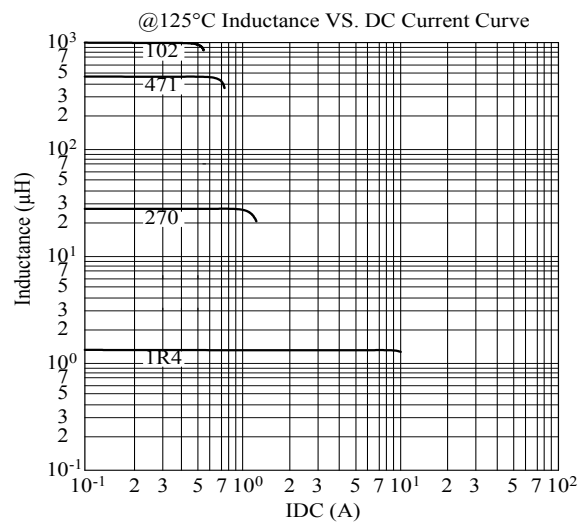
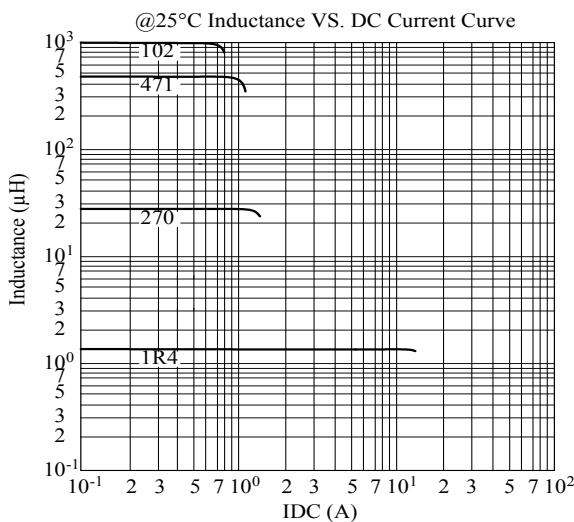
ASS1240 Series



ASS1260 Series



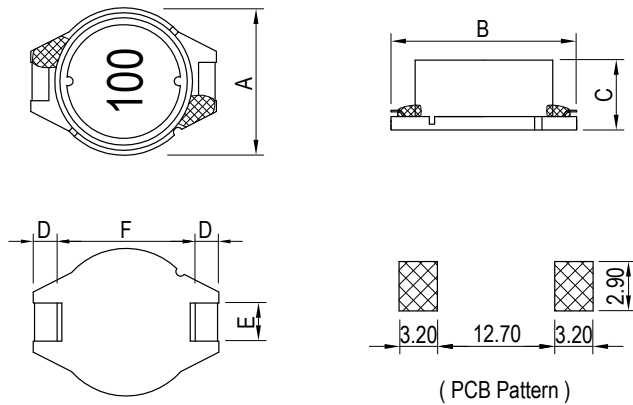
MSS1280 Series



ASS
SERIES

1806

High Inductance



Unit: mm

Series	A	B	C	D	E	F
ASS1806	14.00±0.50	18.20±0.50	6.80±0.30	2.50±0.20	2.60±0.20	13.00±0.30

Features

- Magnetic shielding allows high-density mounting
- Glazing base termination offers excellent terminal strength
- Wide inductance from 1 to 1,000 μ H
- Excellent current handling capability
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM

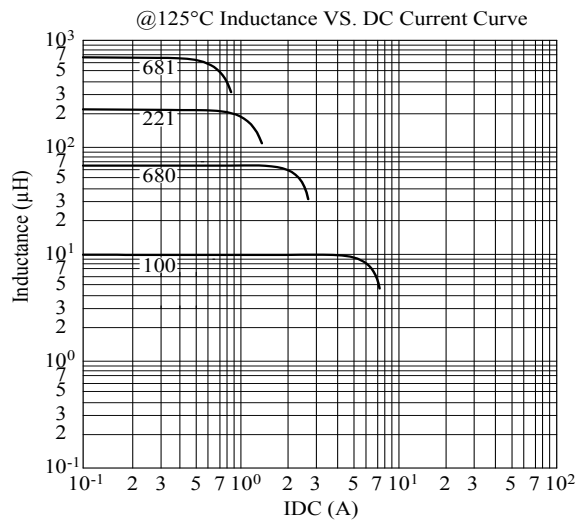
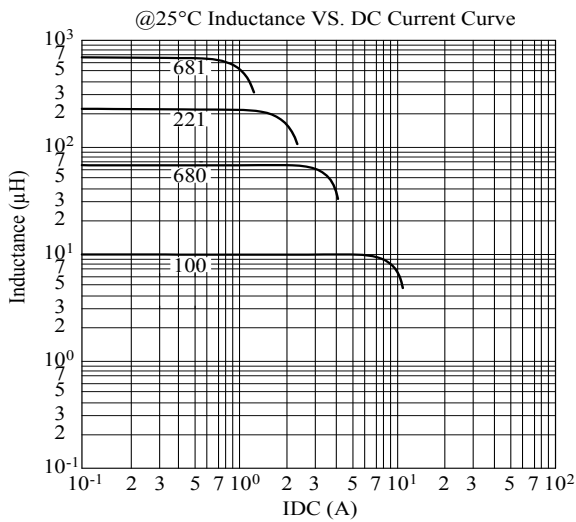


ASS1806 Series

DWG. No.	Inductance (μH) 100k/0.1V	Q		SRF (MHz) typ.	RDC (Ω) max.	I _{rms} (A)	I _{sat} (A)
		ref.	Test Freq. (Hz)				
ASS1806100MLB-□□□	10.0±20%	56	2.52M	19.0	0.040	4.00	8.20
ASS1806150MLB-□□□	15.0±20%	53	2.52M	17.5	0.052	3.60	7.20
ASS1806220MLB-□□□	22.0±20%	51	2.52M	16.0	0.070	3.00	6.20
ASS1806330MLB-□□□	33.0±20%	44	2.52M	10.0	0.100	2.50	5.00
ASS1806470MLB-□□□	47.0±20%	40	2.52M	8.0	0.130	2.00	4.20
ASS1806680MLB-□□□	68.0±20%	37	2.52M	6.0	0.200	1.60	3.40
ASS1806101MLB-□□□	100.0±20%	40	0.796M	4.6	0.320	1.30	2.60
ASS1806151MLB-□□□	150.0±20%	39	0.796M	4.3	0.500	1.05	2.30
ASS1806221MLB-□□□	220.0±20%	29	0.796M	3.5	0.600	1.00	1.90
ASS1806331MLB-□□□	330.0±20%	30	0.796M	3.0	0.920	0.80	1.40
ASS1806471MLB-□□□	470.0±20%	27	0.796M	2.4	1.150	0.64	1.30
ASS1806681MLB-□□□	680.0±20%	19	0.796M	2.1	1.700	0.54	1.10
ASS1806102MLB-□□□	1000.0±20%	46	0.252M	1.5	2.450	0.45	0.90

1. Electrical specifications at 25°C
2. I_{rms} Base on ΔT=40°C typ.
3. I_{sat} Base on ΔL/L0A=10% typ.
4. Inductance test condition 100kHz/0.1V

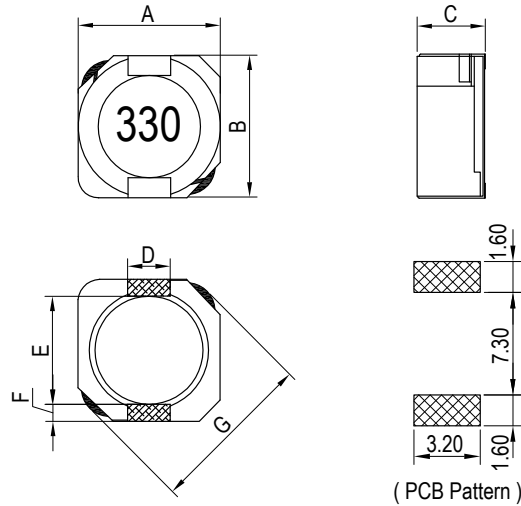
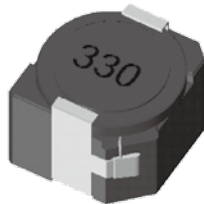
ASS1806 Series



ACU
SERIES

1048

High Current



Unit: mm

Series	A	B	C	D	E	F	G
ACU1048	10.00±0.30	10.20±0.30	4.80±0.30	3.00±0.30	7.80±0.40	1.20±0.15	13.00 ref.

Features

- Metal terminal direct clip on outside body
- Magnetic shielding allows high-density mounting
- High current
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM

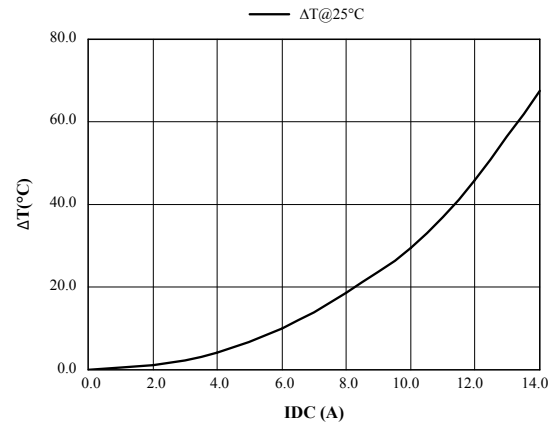
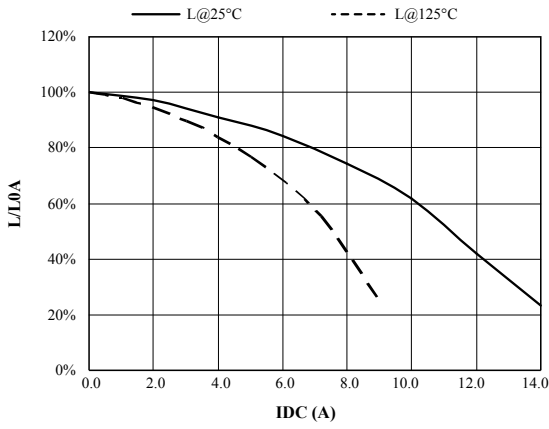


ACU1048 Series

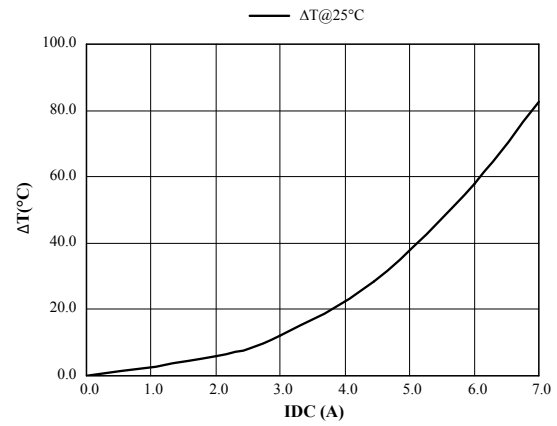
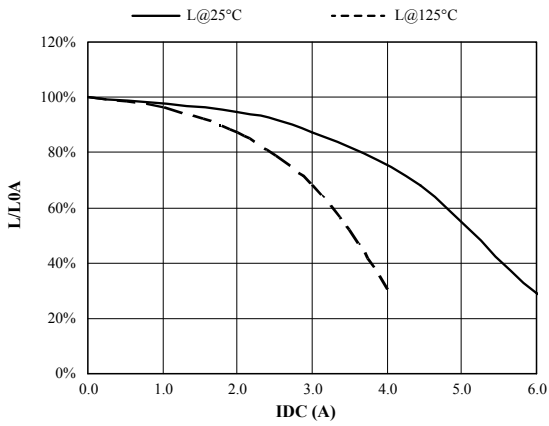
DWG. No.	Inductance (μH)	SRF (MHz) ref.	RDC (mΩ)		Isat (A) typ.	Irms (A) typ.
			typ.	max.		
ACU1048R68YFB-□□□	0.68±30%	110.0	4.5	5.5	13.5	9.50
ACU10481R2YFB-□□□	1.2±30%	85.0	5.8	7.0	10.5	8.30
ACU10482R2YFB-□□□	2.2±30%	53.0	7.1	9.0	8.20	7.20
ACU10483R3YFB-□□□	3.3±30%	40.0	8.6	11.0	7.80	6.50
ACU10484R2YFB-□□□	4.2±30%	29.0	10.4	14.0	6.40	6.10
ACU10486R8YFB-□□□	6.8±30%	27.0	15.1	19.0	5.40	5.40
ACU10488R2YFB-□□□	8.2±30%	21.0	18.1	22.0	4.85	5.00
ACU1048100YFB-□□□	10.0±30%	16.5	23.0	31.0	4.45	4.50
ACU1048120YFB-□□□	12.0±30%	15.0	26.0	35.0	4.00	3.80
ACU1048150YFB-□□□	15.0±30%	14.0	35.0	47.0	3.60	3.40
ACU1048180YFB-□□□	18.0±30%	11.0	38.0	51.0	3.20	3.10
ACU1048220YFB-□□□	22.0±30%	10.5	46.0	62.0	2.95	2.90
ACU1048270YFB-□□□	27.0±30%	10.0	57.0	77.0	2.70	2.60
ACU1048330YFB-□□□	33.0±30%	9.0	69.0	93.0	2.40	2.50
ACU1048390YFB-□□□	39.0±30%	6.8	79.0	106.0	2.30	2.25
ACU1048470YFB-□□□	47.0±30%	5.9	94.0	127.0	2.00	2.00
ACU1048560YFB-□□□	56.0±30%	5.5	124.0	160.0	1.90	1.90
ACU1048680YFB-□□□	68.0±30%	5.0	138.0	208.0	1.65	1.60
ACU1048820YFB-□□□	82.0±30%	4.5	150.0	230.0	1.50	1.45
ACU1048101YFB-□□□	100.0±30%	4.2	179.0	255.0	1.35	1.35
ACU1048121YFB-□□□	120.0±30%	3.8	213.0	305.0	1.28	1.18
ACU1048151YFB-□□□	150.0±30%	3.6	253.0	370.0	1.12	1.10
ACU1048181YFB-□□□	180.0±30%	3.4	307.0	420.0	1.04	1.00
ACU1048221YFB-□□□	220.0±30%	3.0	373.0	500.0	0.94	0.94
ACU1048271YFB-□□□	270.0±30%	2.4	491.0	675.0	0.84	0.80
ACU1048331YFB-□□□	330.0±30%	2.0	613.0	815.0	0.75	0.73
ACU1048471YFB-□□□	470.0±30%	1.8	990.0	1200.0	0.70	0.60

1. Electrical specifications at 25°C
2. Inductance test condition.: 100kHz / 0.1V
3. Irms base on temp. rise 40°C typ.
4. Isat base on ΔL/LOA=35% typ.

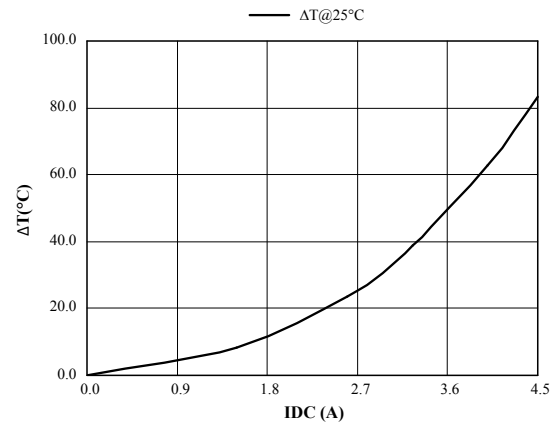
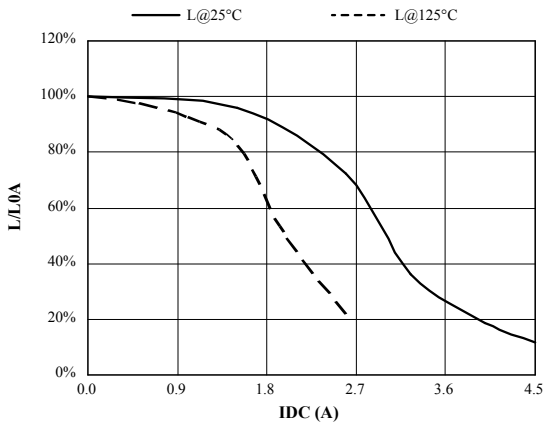
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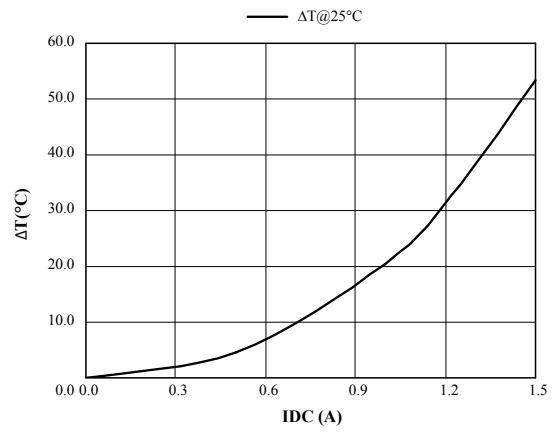
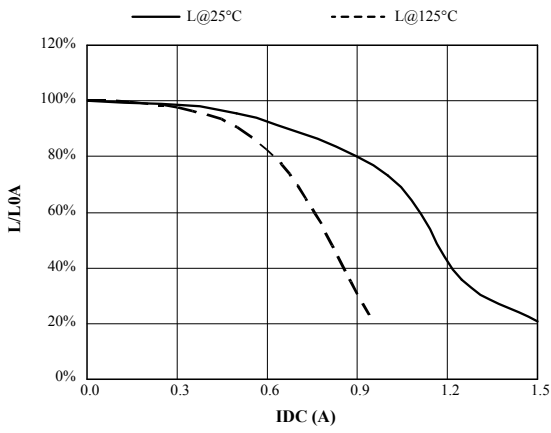
ACU1048100YFB



ACU1048270YFB



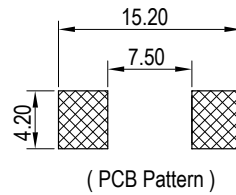
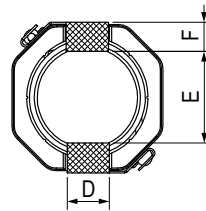
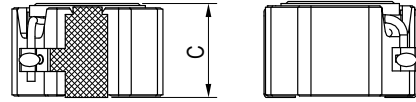
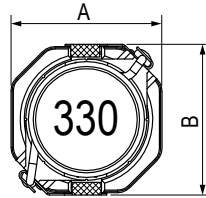
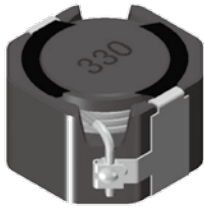
ACU1048221YFB



MCU
SERIES

1277

High Current



Unit: mm

Series	A	B	C	D	E	F
MCU1277	12.50±0.30	12.80±0.30	7.70±0.30	3.50±0.15	7.80 typ.	2.50±0.30

Features

- Metal terminal direct clip on outside body
- Magnetic shielding allows high-density mounting
- High current
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

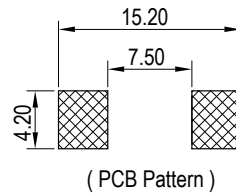
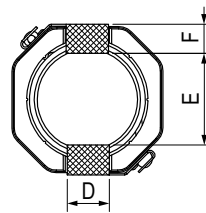
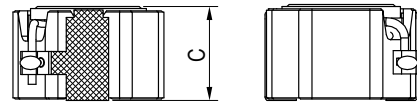
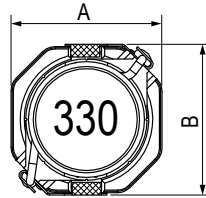
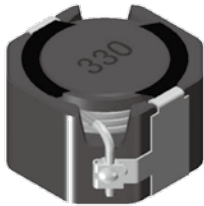
- LED lighting
- HVAC
- Infotainment
- BCM



MCU
SERIES

1277

High Current



Unit: mm

Series	A	B	C	D	E	F
MCU1277	12.50±0.30	12.80±0.30	7.70±0.30	3.50±0.15	7.80 typ.	2.50±0.30

Features

- Metal terminal direct clip on outside body
- Magnetic shielding allows high-density mounting
- High current
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- LED lighting
- HVAC
- Infotainment
- BCM

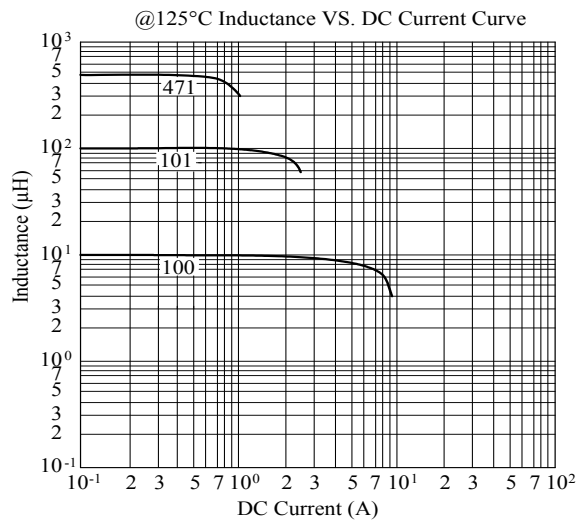
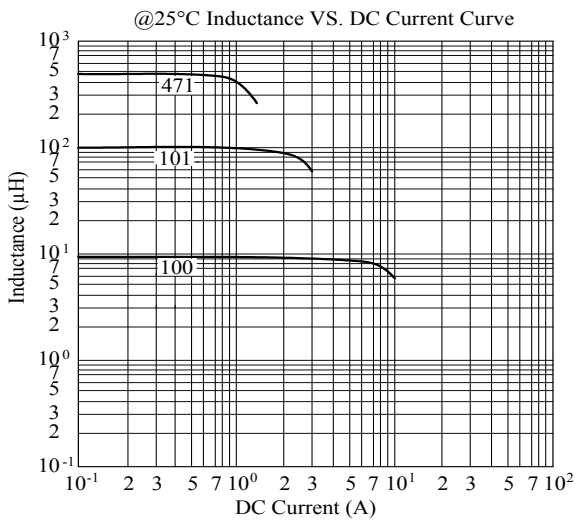


MCU1277 Series

DWG. No.	Inductance (μH)	RDC (mΩ)		Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.		
MCU1277220MSB-□□□	22.0±20%	26.55	34.50	5.50	5.80
MCU1277330MSB-□□□	33.0±20%	40.23	52.50	4.00	4.00
MCU1277470MSB-□□□	47.0±20%	47.50	59.50	3.40	3.50
MCU1277680MSB-□□□	68.0±20%	67.50	84.50	3.00	2.95
MCU1277820MSB-□□□	82.0±20%	86.50	108.00	2.60	2.80
MCU1277101MSB-□□□	100.0±20%	101.20	127.00	2.40	2.70
MCU1277151MSB-□□□	150.0±20%	150.00	187.00	1.90	2.20
MCU1277221MSB-□□□	220.0±20%	237.50	295.00	1.70	1.70
MCU1277331MSB-□□□	330.0±20%	324.00	390.00	1.40	1.35
MCU1277471MSB-□□□	470.0±20%	478.00	574.00	1.10	1.20

1. Electrical specifications at 25°C
2. Inductance test condition.: 100kHz / 0.1V
3. Isat base on ΔL/LOA=35% typ.
4. I_{rms} base on temp. rise 40°C typ.

MCU1277 Series

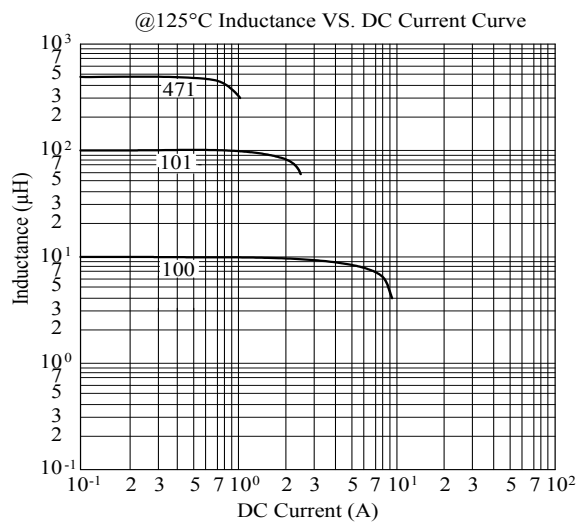
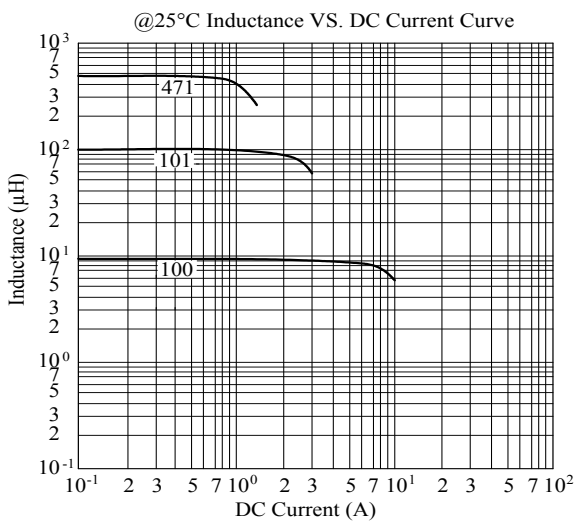


MCU1227 Series

DWG. No.	Inductance (μH)	RDC (mΩ)		Isat (A) typ.	I _{rms} (A) typ.
		typ.	max.		
MCU12771R0YSB-□□□	1.0±30%	4.80	6.24	22.0	11.5
MCU12771R5YSB-□□□	1.5±30%	5.50	7.15	20.0	10.5
MCU12772R2YSB-□□□	2.2±30%	6.30	8.19	16.5	9.70
MCU12773R3YSB-□□□	3.3±30%	7.70	10.00	12.5	9.50
MCU12774R7YSB-□□□	4.7±30%	8.70	11.30	9.60	9.00
MCU12776R8YSB-□□□	6.8±30%	10.00	13.00	7.30	8.50
MCU1277100MSB-□□□	10.0±20%	12.00	14.40	7.20	7.70
MCU1277150MSB-□□□	15.0±20%	16.95	22.00	7.00	6.30
MCU1277220MSB-□□□	22.0±20%	26.55	34.50	5.50	5.80
MCU1277330MSB-□□□	33.0±20%	40.23	52.50	4.00	4.00
MCU1277470MSB-□□□	47.0±20%	47.50	59.50	3.40	3.50
MCU1277680MSB-□□□	68.0±20%	67.50	84.50	3.00	2.95
MCU1277820MSB-□□□	82.0±20%	86.50	108.0	2.60	2.80
MCU1277101MSB-□□□	100.0±20%	101.20	127.0	2.40	2.70
MCU1277151MSB-□□□	150.0±20%	150.00	187.0	1.90	2.20
MCU1277221MSB-□□□	220.0±20%	237.50	295.0	1.70	1.70
MCU1277331MSB-□□□	330.0±20%	324.00	390.0	1.40	1.35
MCU1277471MSB-□□□	470.0±20%	478.00	574.0	1.10	1.20

1. Electrical specifications at 25°C
2. Inductance test condition.: 100kHz / 0.1V
3. Isat base on ΔL/L0A=35% typ.
4. I_{rms} base on temp. rise 40°C typ.

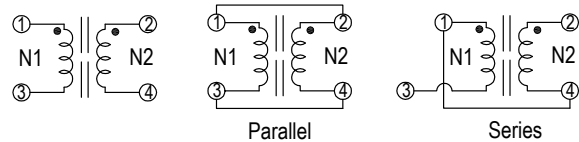
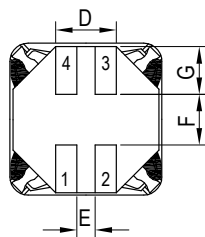
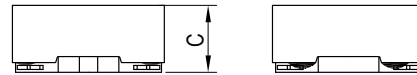
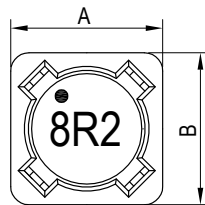
MCU1227 Series



MBF
SERIES

0703

Coupled



For PCB pattern information,
please see page 104

Unit: mm

Series	A	B	C	D	E	F	G
MBF0703	7.60 max.	7.60 max.	3.40±0.20	2.60±0.30	1.00±0.30	2.70±0.30	2.10±0.50

Features

- Bifilar winding with excellent impedance coupling effect
- Reduces radiated EMI emissions
- Dual winding inductors that can be used as either a single inductor, or in coupled inductor/ transformer applications (1:1 turns ratio)
- AEC-Q200 Grade 0
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- DC-DC converters

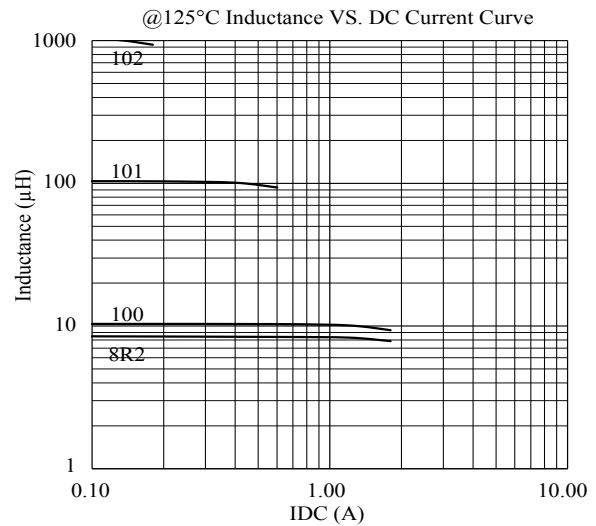
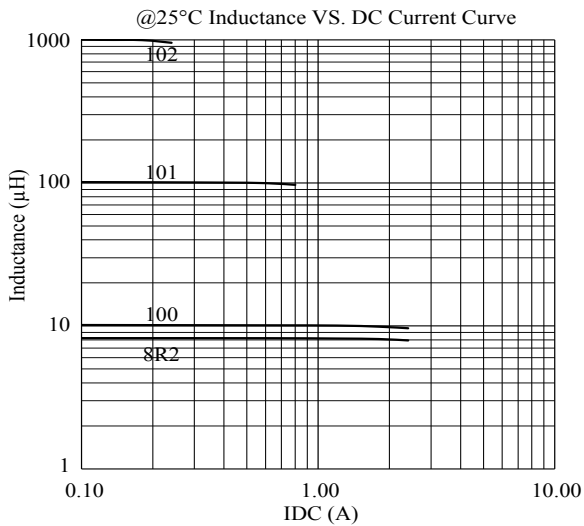


MBF0703 Series

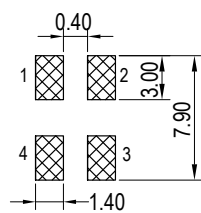
DWG. No.	Parallel Ratings				Series Ratings			
	Inductance (μH)	RDC (mΩ) max.	Isat (A) typ.	Irms (A) typ.	Inductance (μH)	RDC (mΩ) max.	Isat (A) typ.	Irms (A) typ.
MBF07038R2MLB-□□□	8.20±20%	77.2	2.66	2.19	34.10±20%	306	1.33	1.100
MBF0703100MLB-□□□	10.00±20%	82.6	2.47	2.08	39.60±20%	342	1.24	1.040
MBF0703150MLB-□□□	15.00±20%	119.0	2.05	1.83	59.60±20%	470	1.03	0.916
MBF0703220MLB-□□□	22.00±20%	150.0	1.67	1.62	89.50±20%	620	0.83	0.811
MBF0703330MLB-□□□	33.00±20%	240.0	1.35	1.31	140.50±20%	1000	0.68	0.653
MBF0703470MLB-□□□	47.00±20%	338.0	1.14	1.08	194.20±20%	1280	0.57	0.542
MBF0703680MLB-□□□	68.00±20%	507.0	0.96	0.89	289.30±20%	1920	0.48	0.444
MBF0703820MLB-□□□	82.00±20%	610.0	0.89	0.86	324.70±20%	2280	0.44	0.430
MBF0703101MLB-□□□	100.00±20%	715.0	0.79	0.73	397.60±20%	2640	0.39	0.367
MBF0703151MLB-□□□	150.00±20%	986.0	0.65	0.58	608.20±20%	3630	0.32	0.289
MBF0703221MLB-□□□	220.00±20%	1480.0	0.53	0.52	922.60±20%	5500	0.27	0.260
MBF0703331MLB-□□□	330.00±20%	2160.0	0.44	0.42	1335.00±20%	8250	0.22	0.211
MBF0703471MLB-□□□	470.00±20%	2820.0	0.37	0.35	1859.00±20%	11220	0.18	0.173
MBF0703681MLB-□□□	680.00±20%	3960.0	0.31	0.29	2930.00±20%	16170	0.15	0.143
MBF0703821MLB-□□□	820.00±20%	5010.0	0.28	0.27	3559.00±20%	20070	0.14	0.134
MBF0703102MLB-□□□	1000.00±20%	6110.0	0.25	0.26	4120.00±20%	24420	0.13	0.128

1. Electrical specifications at 25°C
2. L Test Freq.:100kHz / 0.25 V
3. Isat base on ΔL/L0A=30% typ.
4. I rms base on Temp. rise 40°C typ.
5. Hi-Pot test (N1-N2) :500Vac / 60Hz , 3mA , 1sec.

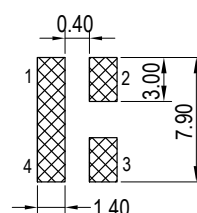
MBF0703 Series



PCB Pattern



Dual inductor Mode

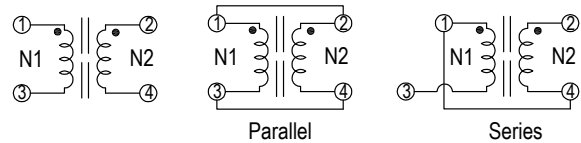
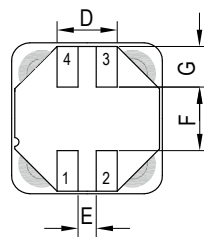
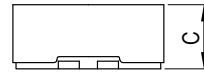
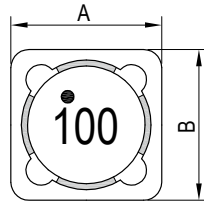


Series Mode

MSF
SERIES

1258 / 1278

Coupled



For PCB pattern information,
please see page 108

Unit: mm

Series	A	B	C	D	E	F	G
MSF1258	12.50 max.	12.50 max.	6.00±0.20	5.00±0.30	1.80±0.20	5.00±0.30	3.50±0.50
MSF1278	12.50 max.	12.50 max.	8.00 max.	5.00±0.30	1.80±0.20	5.00±0.30	3.50±0.50

Features

- Bifilar winding with excellent impedance coupling effect
- Reduces radiated EMI emissions
- Dual winding inductors that can be used as either a single inductor, or in coupled inductor/ transformer applications (1:1 turns ratio)
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- DC-DC converters

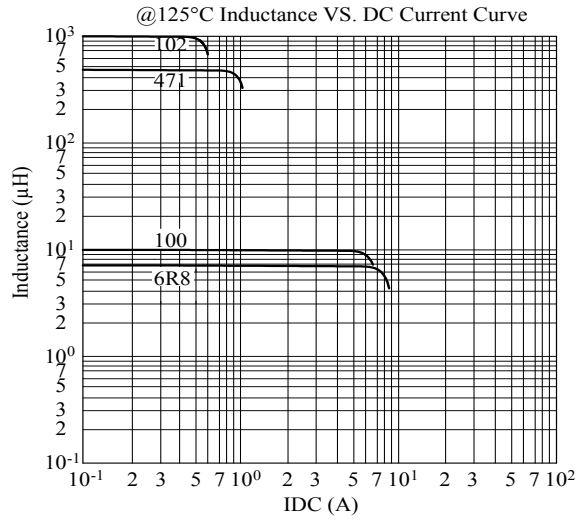
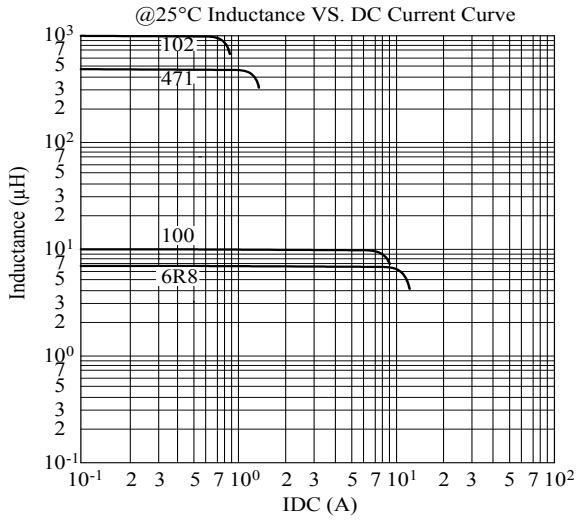


MSF1258 Series								
DWG. No.	Parallel Ratings				Series Ratings			
	Inductance (μH)	RDC ($\text{m}\Omega$) max.	Isat (A) typ.	Irms (A) typ.	Inductance (μH)	RDC ($\text{m}\Omega$) max.	Isat (A) typ.	Irms (A) typ.
MSF1258R47YLB-□□□	0.47 \pm 30%	5.3	33.00	14.60	1.824 \pm 30%	21.2	16.500	7.300
MSF12581R0YLB-□□□	1.00 \pm 30%	6.2	23.60	12.60	3.576 \pm 30%	26.0	11.800	6.300
MSF12581R5YLB-□□□	1.50 \pm 30%	7.3	18.30	12.00	5.912 \pm 30%	30.2	9.150	5.800
MSF12582R2YLB-□□□	2.20 \pm 30%	8.5	15.00	10.90	8.832 \pm 30%	33.3	7.500	5.460
MSF12583R3YLB-□□□	3.30 \pm 30%	10.1	12.70	9.26	12.340 \pm 30%	37.2	6.350	4.630
MSF12584R7YLB-□□□	4.70 \pm 30%	13.7	9.71	7.18	21.100 \pm 30%	47.9	4.860	3.590
MSF12586R8YLB-□□□	6.80 \pm 30%	18.6	8.68	6.64	26.350 \pm 30%	67.2	4.340	3.320
MSF12588R2YLB-□□□	8.20 \pm 30%	19.4	7.86	5.54	32.190 \pm 30%	73.7	3.930	2.770
MSF1258100MLB-□□□	10.00 \pm 20%	24.6	7.17	5.35	38.620 \pm 20%	93.4	3.590	2.670
MSF1258150MLB-□□□	15.00 \pm 20%	32.9	5.69	4.27	61.400 \pm 20%	125.0	2.850	2.130
MSF1258220MLB-□□□	22.00 \pm 20%	45.1	4.71	3.70	89.440 \pm 20%	172.0	2.360	1.840
MSF1258330MLB-□□□	33.00 \pm 20%	61.8	3.84	3.28	135.000 \pm 20%	256.0	1.920	1.640
MSF1258470MLB-□□□	47.00 \pm 20%	86.0	3.24	2.71	189.900 \pm 20%	340.0	1.620	1.350
MSF1258680MLB-□□□	68.00 \pm 20%	116.5	2.70	2.22	271.600 \pm 20%	444.0	1.350	1.110
MSF1258820MLB-□□□	82.00 \pm 20%	150.0	2.39	2.05	347.600 \pm 20%	568.0	1.200	1.030
MSF1258101MLB-□□□	100.00 \pm 20%	171.3	2.20	1.78	410.800 \pm 20%	656.0	1.100	0.892
MSF1258151MLB-□□□	150.00 \pm 20%	253.8	1.81	1.48	604.400 \pm 20%	972.0	0.905	0.739
MSF1258221MLB-□□□	220.00 \pm 20%	354.0	1.51	1.19	867.200 \pm 20%	1416.0	0.755	0.594
MSF1258331MLB-□□□	330.00 \pm 20%	574.0	1.22	1.06	1330.000 \pm 20%	2290.0	0.610	0.530
MSF1258471MLB-□□□	470.00 \pm 20%	830.0	1.02	0.87	1892.000 \pm 20%	3197.0	0.510	0.434
MSF1258681MLB-□□□	680.00 \pm 20%	1212.0	0.85	0.70	2719.000 \pm 20%	4635.0	0.425	0.350
MSF1258821MLB-□□□	820.00 \pm 20%	1460.0	0.77	0.60	3312.000 \pm 20%	5363.0	0.385	0.301
MSF1258102MLB-□□□	1000.00 \pm 20%	1854.0	0.70	0.57	4032.000 \pm 20%	6782.0	0.350	0.283

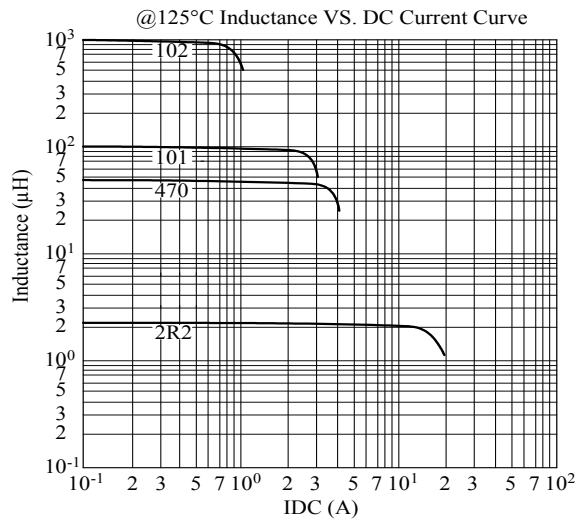
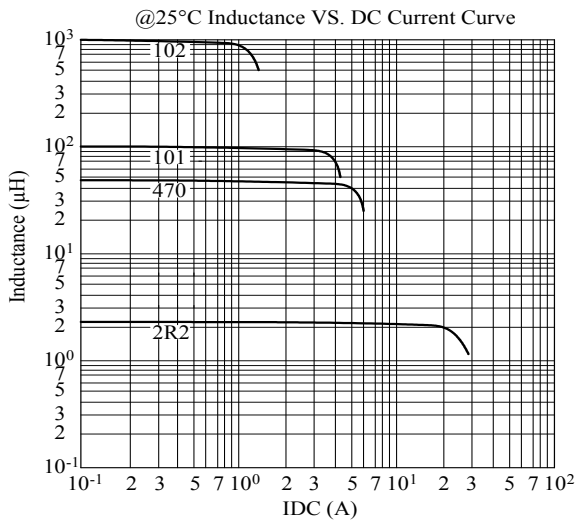
MSF1278 Series								
DWG. No.	Parallel Ratings				Series Ratings			
	Inductance (μH)	RDC (mΩ) max.	Isat (A) typ.	I _{rms} (A) typ.	Inductance (μH)	RDC (mΩ) max.	Isat (A) typ.	I _{rms} (A) typ.
MSF1278R47YLB-□□□	0.47±30%	5.5	56.00	14.60	1.676±30%	21.6	28.000	7.300
MSF12781R0YLB-□□□	1.00±30%	6.7	40.00	12.80	3.284±30%	26.0	20.000	6.300
MSF12781R5YLB-□□□	1.50±30%	7.6	31.10	11.40	5.428±30%	30.6	15.600	5.700
MSF12782R2YLB-□□□	2.20±30%	9.2	25.50	10.60	8.108±30%	33.8	12.700	5.300
MSF12783R3YLB-□□□	3.30±30%	11.0	21.50	9.60	11.320±30%	40.0	10.800	4.800
MSF12784R7YLB-□□□	4.70±30%	13.5	16.50	8.25	19.360±30%	50.0	8.240	4.130
MSF12786R8YLB-□□□	6.80±30%	18.3	13.30	7.34	29.550±30%	65.6	6.670	3.670
MSF12788R2YLB-□□□	8.20±30%	19.1	12.20	6.32	35.440±30%	71.4	6.090	3.160
MSF1278100MLB-□□□	10.00±20%	24.1	11.20	6.04	41.880±20%	92.1	5.600	3.020
MSF1278150MLB-□□□	15.00±20%	33.3	9.66	5.03	56.360±20%	129.0	4.830	2.510
MSF1278220MLB-□□□	22.00±20%	50.3	7.57	4.00	91.720±20%	192.0	3.780	2.000
MSF1278330MLB-□□□	33.00±20%	66.4	6.22	3.23	135.700±20%	265.0	3.110	1.610
MSF1278470MLB-□□□	47.00±20%	89.8	5.28	2.95	188.200±20%	353.0	2.640	1.470
MSF1278680MLB-□□□	68.00±20%	123.0	4.44	2.44	265.900±20%	469.0	2.220	1.220
MSF1278820MLB-□□□	82.00±20%	153.0	4.06	2.09	319.000±20%	578.0	2.030	1.040
MSF1278101MLB-□□□	100.00±20%	175.0	3.64	1.96	397.200±20%	701.0	1.820	0.980
MSF1278151MLB-□□□	150.00±20%	261.0	3.01	1.59	579.600±20%	1013.0	1.510	0.796
MSF1278221MLB-□□□	220.00±20%	343.0	2.43	1.29	886.000±20%	1380.0	1.220	0.645
MSF1278331MLB-□□□	330.00±20%	540.0	2.01	1.04	1294.000±20%	2172.0	1.010	0.522
MSF1278471MLB-□□□	470.00±20%	865.0	1.68	0.85	1868.000±20%	3300.0	0.838	0.427
MSF1278681MLB-□□□	680.00±20%	1296.0	1.39	0.76	2707.000±20%	4888.0	0.697	0.380
MSF1278821MLB-□□□	820.00±20%	1632.0	1.27	0.65	3272.000±20%	5896.0	0.633	0.325
MSF1278102MLB-□□□	1000.00±20%	1992.0	1.14	0.61	4020.000±20%	7202.0	0.571	0.307

1. Electrical specifications at 25°C
2. Inductance Test Condition.: 100kHz / 0.25V
3. I_{rms} base on Temp. rise 40°C typ.
4. I_{peak} base on ΔL/LOA=30% typ.
5. Hi-Pot test (N1-N2): 500Vac / 60Hz , 3mA , 1sec.

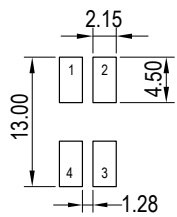
MSF1258 Series



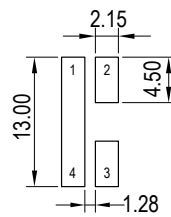
MSF1278 Series



PCB Pattern



Dual inductor Mode

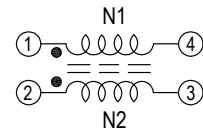
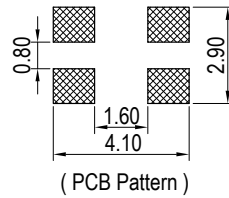
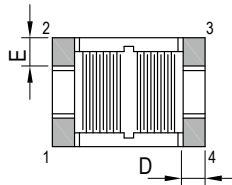
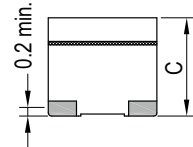
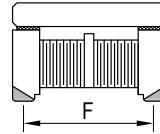
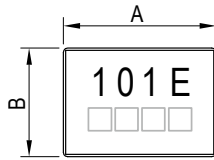
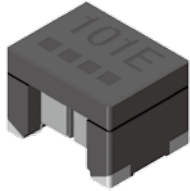


Series Mode

MSF
SERIES

3225

Data Line



Unit: mm

Series	A	B	C	D	E	F
MSF3225	3.20±0.20	2.50±0.20	2.40 max.	0.60 ref.	0.65 ref.	2.60 ref.

Features

- Low profile to 2.5mm
- Automatic bifilar winding & core assembly excellent impedance coupling effect
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- CAN-BUS

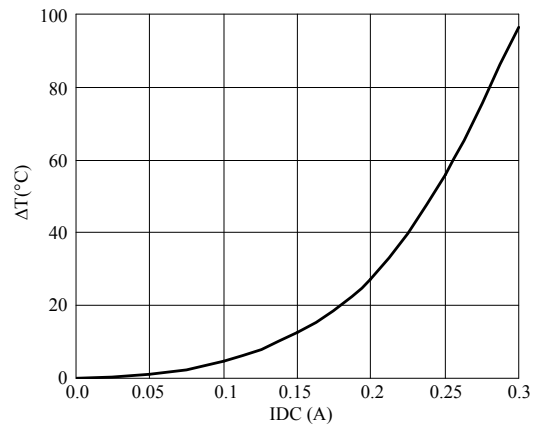
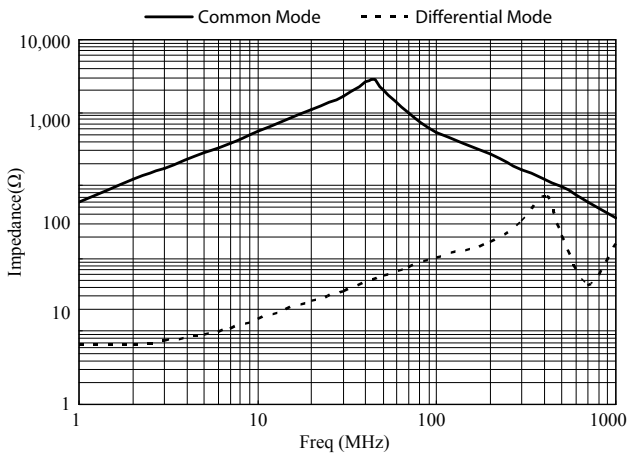


MSF3225 Series

DWG. No.	Inductance (μH)	Lstray (μH) typ.	RDC (Ω) max.	IDC (A)	Common mode impedance (kΩ) (@10MHz)	
					typ	min.
MSF3225101YEB-□□□	100±50%	0.60	3.50	0.10	5.50	2.00

1. Electrical specifications at 25°C
2. Inductance Test Condition.: 100kHz / 0.1V
3. IDC base on Temp. rise 40°C max.
4. Insulation resistance: 10MΩ min. @50Vdc
5. Rated voltage: 50Vdc

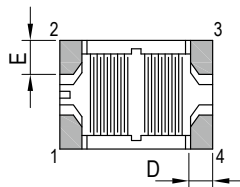
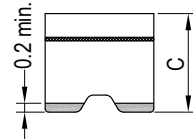
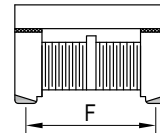
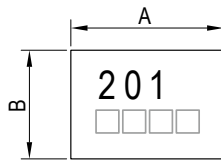
MSF3225101YEB



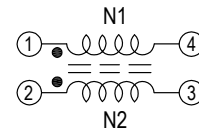
ASF
SERIES

4532-E / 4532-C

Data Line



For PCB pattern information,
please see page 114



Unit: mm

Series	A	B	C	D	E	F
ASF4532-E	4.50 ±0.20	3.20 ±0.20	3.00 ±0.20	0.70 ref.	1.00 ref.	3.80 ref.
ASF4532-C	4.50 ±0.20	3.20 ±0.20	3.00 ±0.20	0.70 ref.	0.65 ref.	3.80 ref.

Features

- Low profile to 2.5mm
- Automatic bifilar winding & core assembly excellent impedance coupling effect
- AEC-Q200 Grade 1: ASF4532-E
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)
- AEC-Q200 Grade 0: ASF4532-C
- Operating temp.: -55°C ~ +150°C (including self-temperature rise)

Application

- CAN-BUS



ASF4532-E Series

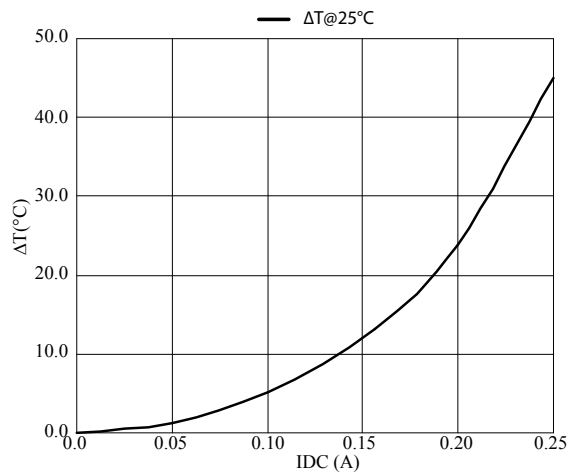
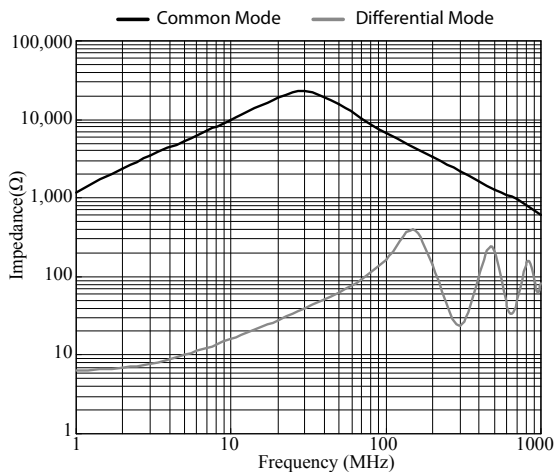
DWG. No.	Inductance (μH)	Lstray (μH) typ.	RDC (Ω) max.	IDC (A)	Common mode impedance (kΩ) (@10MHz)	
					min.	typ.
ASF4532201YEB-□□□	200±50%	0.45	4.50	0.11	4.50	10.0

ASF4532-C Series

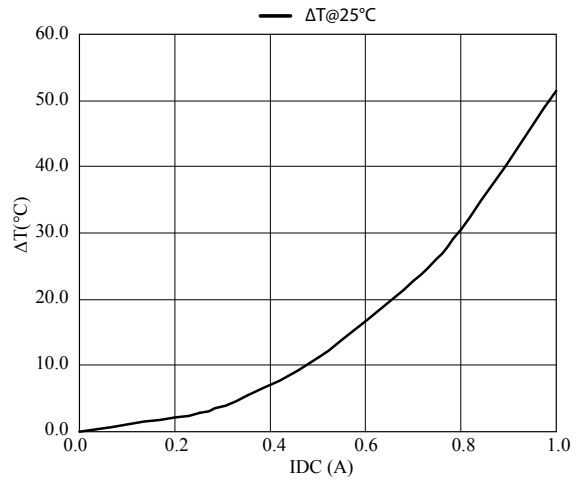
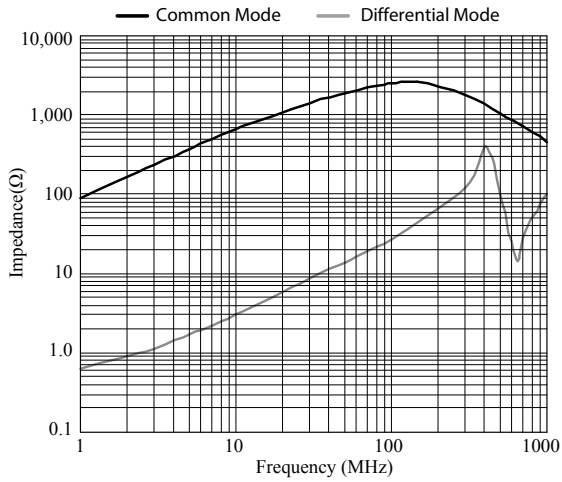
DWG. No.	Inductance (μH)	Lstray (μH) typ.	RDC (Ω) max.	IDC (A) max.	Common mode impedance (kΩ) (@10MHz)	
					min.	typ.
ASF4532110YC□-□□□	11.0 +50% -30%	0.10	0.50	0.36	0.30	0.60
ASF4532220YC□-□□□	22.0 +50% -30%	0.15	0.60	0.31	0.60	1.20
ASF4532510YC□-□□□	51.0 +50% -30%	0.30	1.00	0.23	1.50	3.50
ASF4532101YC□-□□□	100.0 +50% -30%	0.35	1.50	0.20	3.00	7.50

1. Electrical specifications at 25°C
2. Inductance Test Condition.: 100kHz / 0.1V
3. IDC base on Temp. rise 40°C max.
4. Insulation resistance: 10MΩ min. @50Vdc
5. Rated voltage: 50Vdc

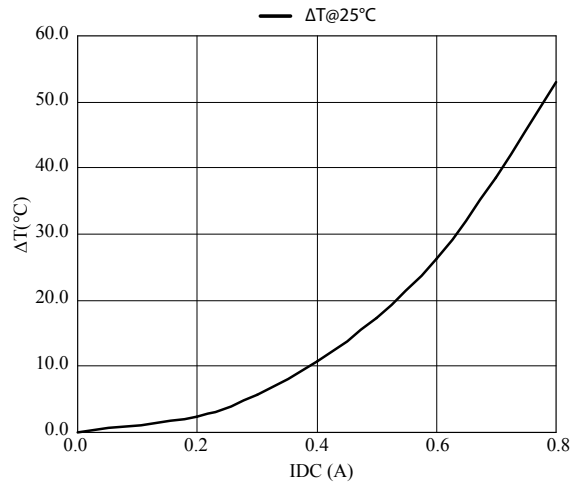
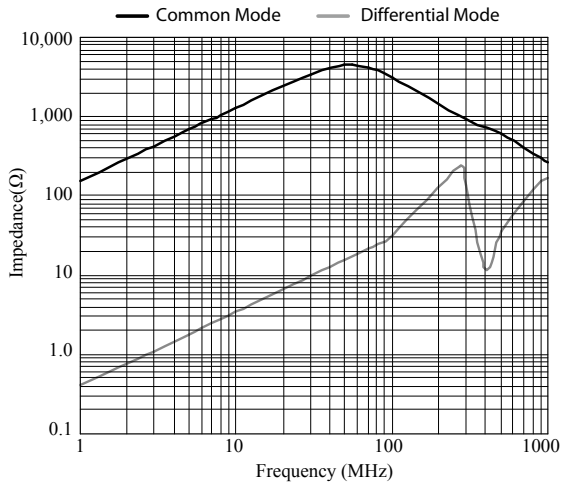
ASF4532201YEB



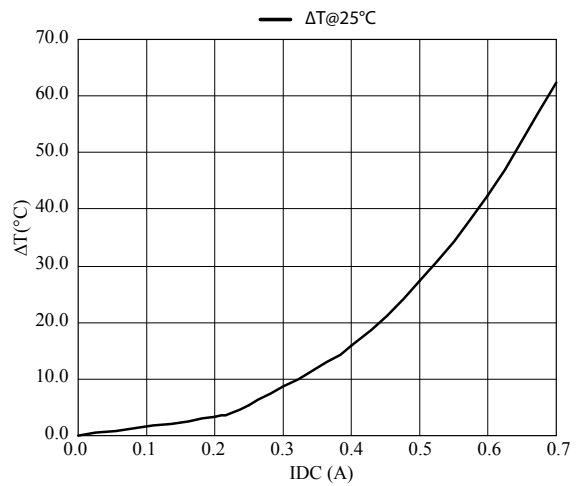
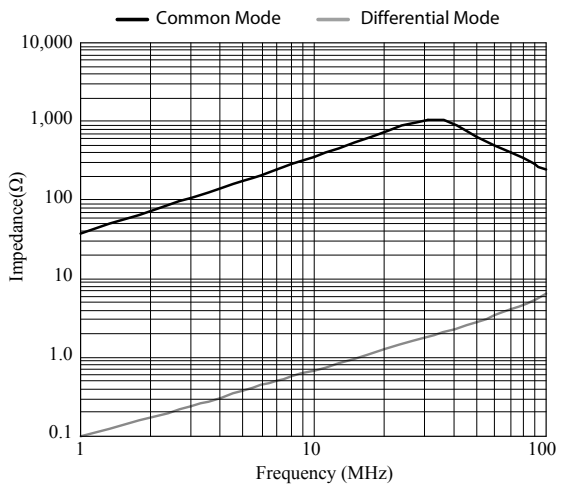
ASF4532110YC □



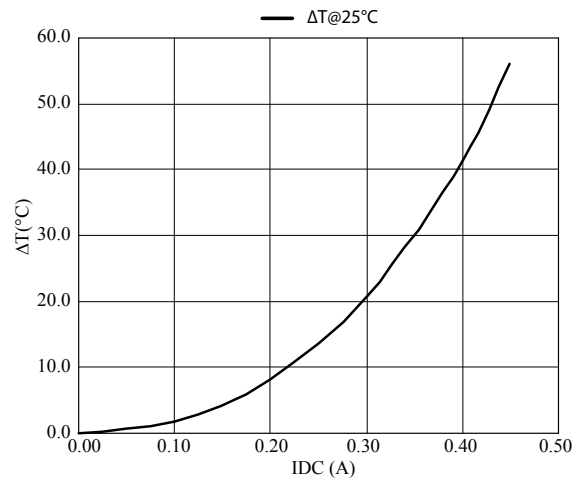
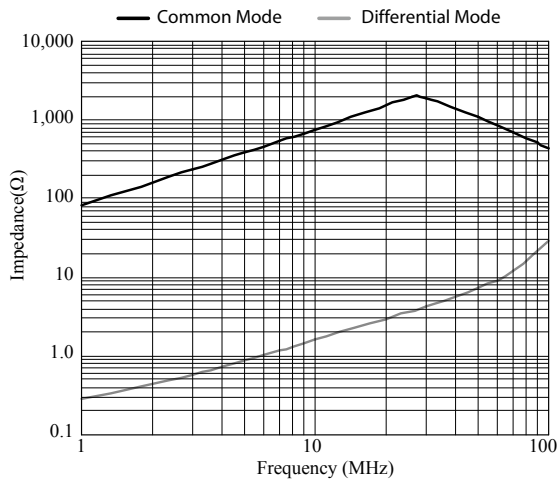
ASF4532220YC □



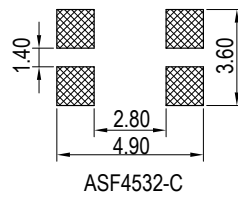
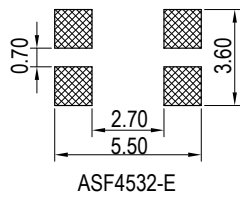
ASF4532510YC □



ASF4532101YC□



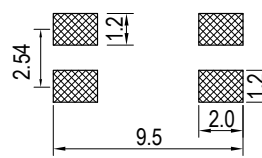
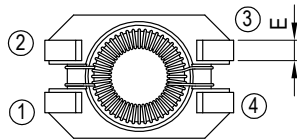
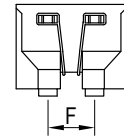
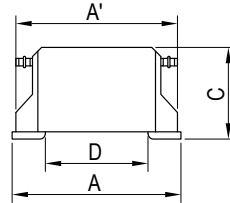
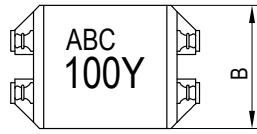
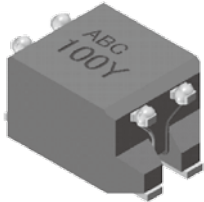
PCB Pattern



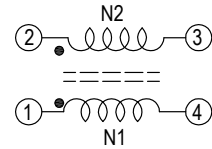
MSF
SERIES

9050

Data Line



(PCB Pattern)



Unit: mm

Series	A	A'	B	C	D	E	F
MSF9050	9.20±0.30	8.70±0.30	6.00±0.30	5.00±0.30	5.60±0.30	1.00±0.10	2.54 ref.

Features

- Reduces radiated EMI emissions
- AEC-Q200 Grade 2
- Operating temp.: -40°C ~ +105°C (including self-temperature rise)

Application

- Suited for LAN and Telecom applications

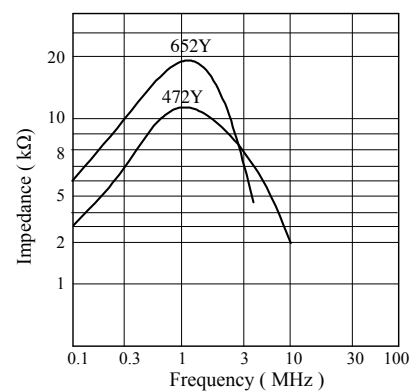
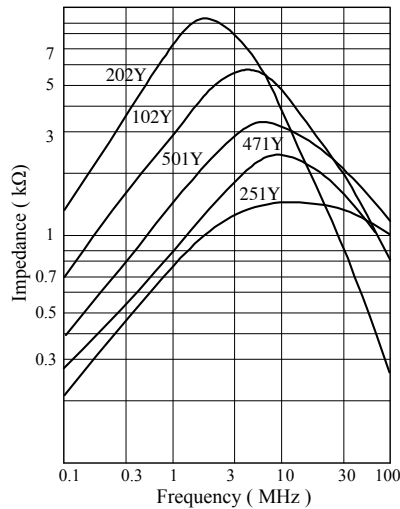
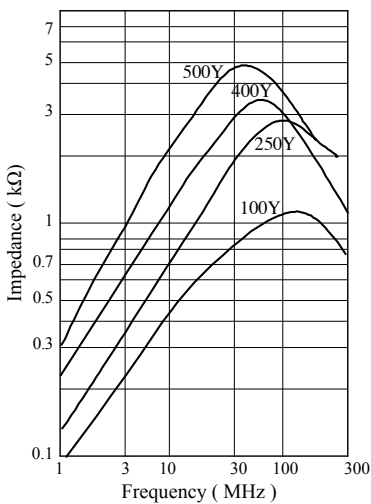


MSF9050 Series

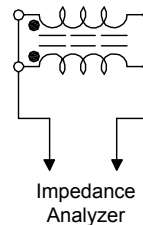
DWG. No.	Inductance L1, L2 (μH)	Test condition	DC Resistance N1, N2 (Ω)	Nominal Voltage Vdc (V)	Rated current (A)	Impedance (Ω)	Freq. Range (MHz)
MSF9050100YSB-□□□	10±30%	0.1V,1kHz	0.08 max.	80	1.6	200 min.	20 ~ 300
MSF9050250YSB-□□□	25±30%	0.1V,1kHz	0.16 max.	80	1.0	600 min.	20 ~ 150
MSF9050400YSB-□□□	40±30%	0.1V,1kHz	0.25 max.	80	0.9	800 min.	20 ~ 100
MSF9050500YSB-□□□	50±30%	0.1V,1kHz	0.32 max.	80	0.8	1500 min.	20 ~ 100
MSF9050251YSB-□□□	250±50%	5mV,100kHz	0.13 max.	80	1.2	600 min.	3 ~ 20
MSF9050471YSB-□□□	470±50%	5mV,100kHz	0.14 max.	80	1.1	1000 min.	2 ~ 20
MSF9050501YSB-□□□	500±50%	5mV,100kHz	0.15 max.	80	1.0	1000 min.	1 ~ 20
MSF9050102YSB-□□□	1000±50%	5mV,100kHz	0.31 max.	80	0.8	1500 min.	1 ~ 15
MSF9050202YSB-□□□	2000±50%	5mV,100kHz	0.42 max.	80	0.6	3000 min.	1 ~ 5
MSF9050472YSB-□□□	4700±50%	5mV,100kHz	0.90 max.	80	0.4	4000 min.	0.3 ~ 3
MSF9050652YSB-□□□	6500±50%	5mV,100kHz	1.05 max.	80	0.3	5000 min.	0.3 ~ 2

1. Electrical specifications at 25°C
2. Irms base on Temp. rise 45°C max.
3. HI-Pot test (N1-N2) : 500Vac / 60Hz , 3mA , 3sec.

MSF9050 Series



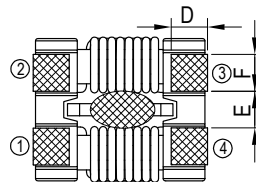
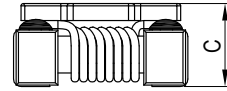
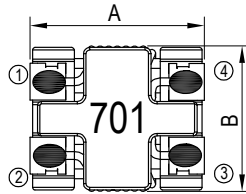
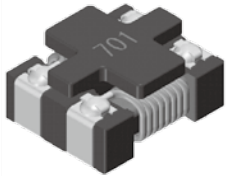
Measuring circuit :



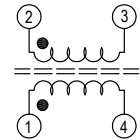
AQF
SERIES

7035 / 9045 / 1260

Power Line



For PCB pattern information,
please see page 121



Unit: mm

Series	A	B	C	D	E	F
AQF7035	7.00±0.20	6.00±0.20	3.50 max.	1.50±0.20	1.70±0.20	1.30±0.20
AQF9045	9.00±0.20	7.00±0.20	4.50 max.	1.50±0.20	2.20±0.20	1.30±0.20
AQF1260	12.00±0.30	11.00±0.30	6.00 max.	2.30±0.20	2.70±0.20	2.50±0.20

Features

- Reducing power noise for good performance.
- Low profile for SMD type.
- AEC-Q200 Grade 1
- Operating temp.: -40°C ~ +125°C (including self-temperature rise)

Application

- Power lines noise against for automotive applications.



AQF7035 Series

DWG. No.	Impedance (Ω)		Test freq. (MHz)	L1, L2 (μ H) ref.	RDC1, RDC2 (m Ω) max.	IDC (A) max.
	min.	typ.				
AQF7035301YSB-□□□	225	300	100	4.00	10.0	5.00
AQF7035701YSB-□□□	500	700	100	7.00	15.0	4.00
AQF7035102YSB-□□□	600	1000	100	7.90	23.0	3.00
AQF7035132YSB-□□□	910	1300	100	10.4	25.0	2.50
AQF7035302YSB-□□□	1800	3000	100	22.6	72.0	1.20

AQF9045 Series

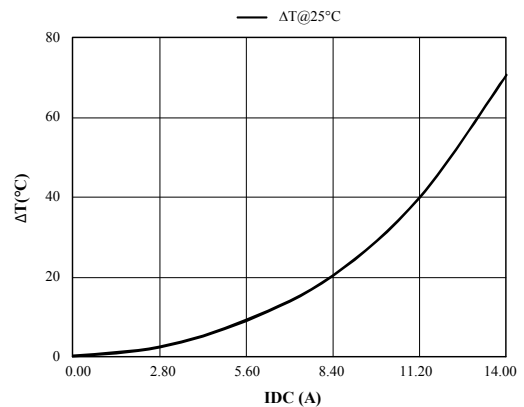
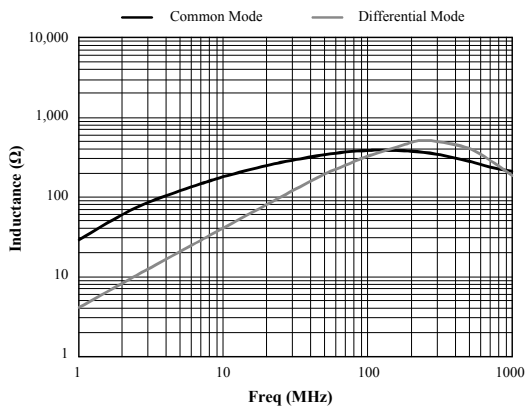
DWG. No.	Impedance (Ω)		Test freq. (MHz)	L1, L2 (μ H) ref.	RDC1, RDC2 (m Ω) max.	IDC (A) max.
	min.	typ.				
AQF9045701YSB-□□□	500	700	100	7.50	10.00	5.00

AQF1260 Series

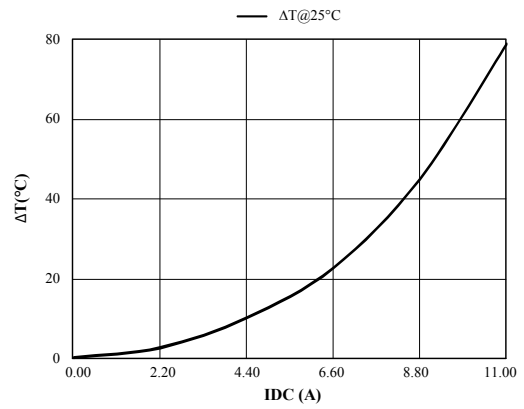
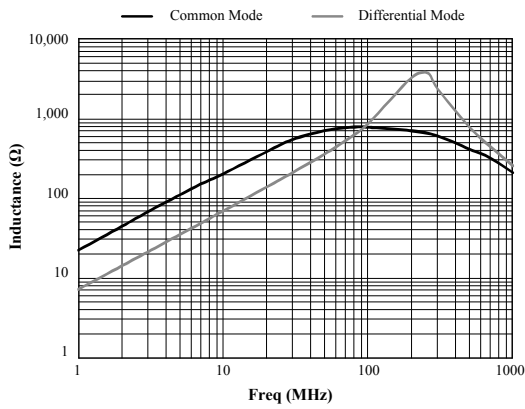
DWG. No.	Impedance (Ω)		Test freq. (MHz)	L1, L2 (μ H) ref.	RDC1, RDC2 (m Ω) max.	IDC (A) max.
	min.	typ.				
AQF1260701YSB-□□□	500	700	100	9.00	6.00	8.00
AQF1260102YSB-□□□	750	1000	100	12.5	14.0	6.00

1. Electrical specifications at 25°C
2. Nominal voltage : 80Vdc
3. Inductance Test condition : 100kHz /0.1V
4. IDC base on temp. rise : 40°C max.
5. Insulation Resistance 10M Ω min.@100Vdc
6. Hi-pot test (N1 to N2) : 500Vac, 3mA , 1sec.

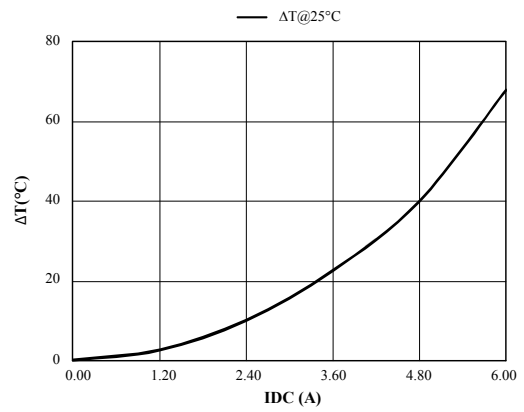
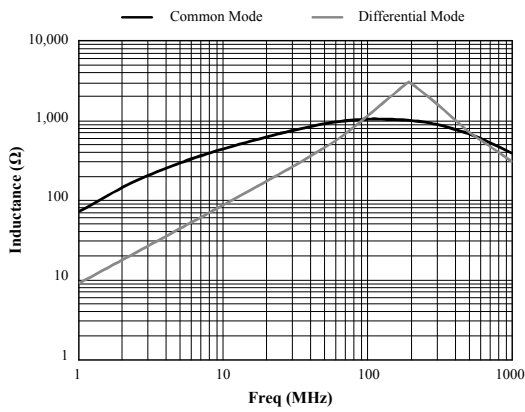
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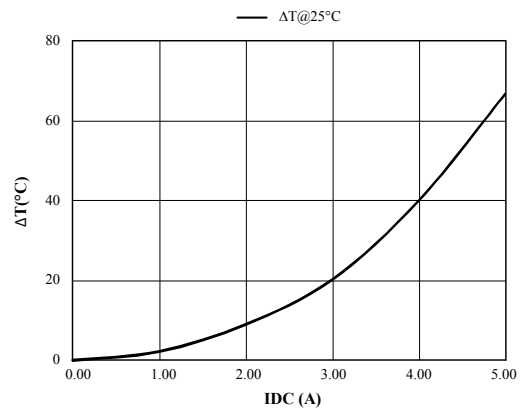
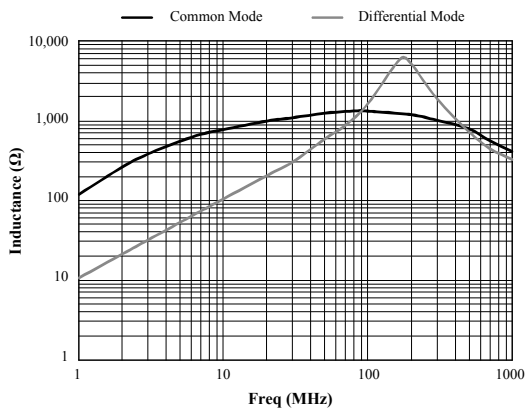
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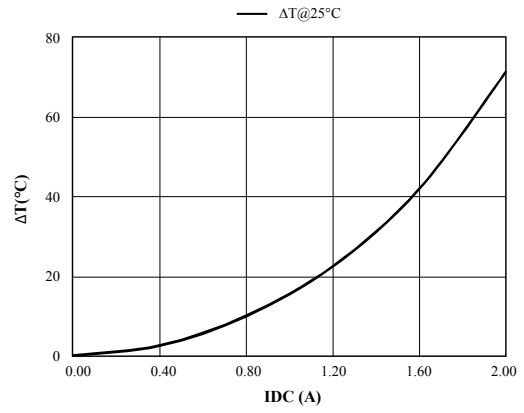
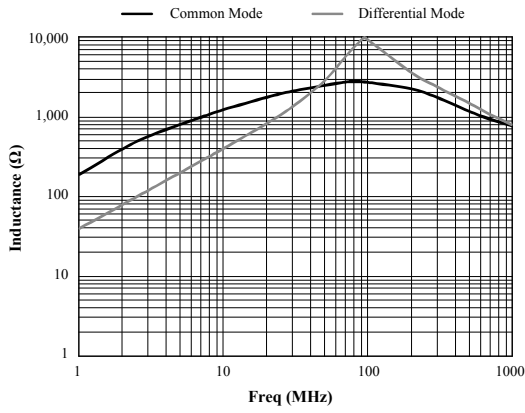
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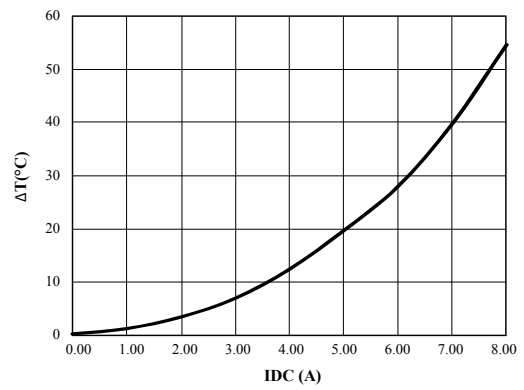
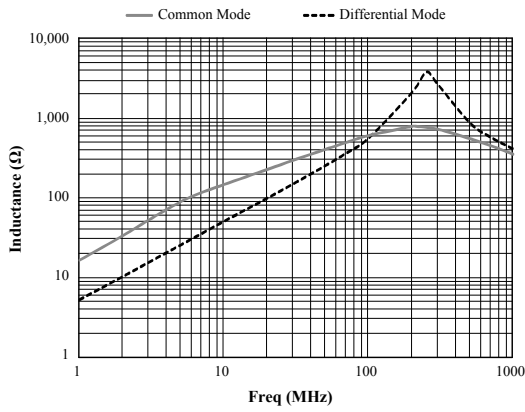
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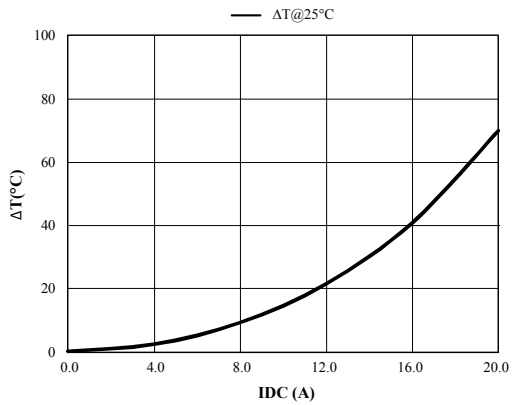
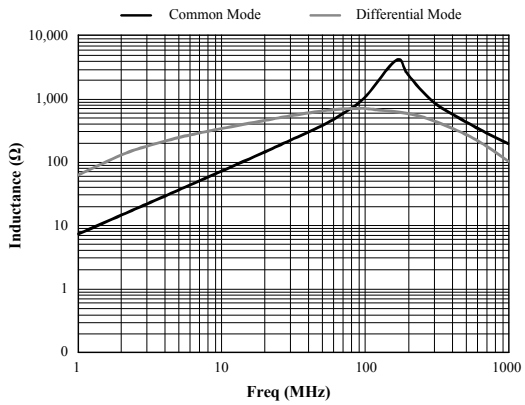
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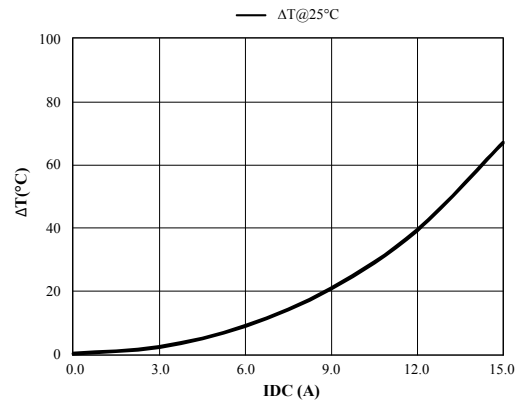
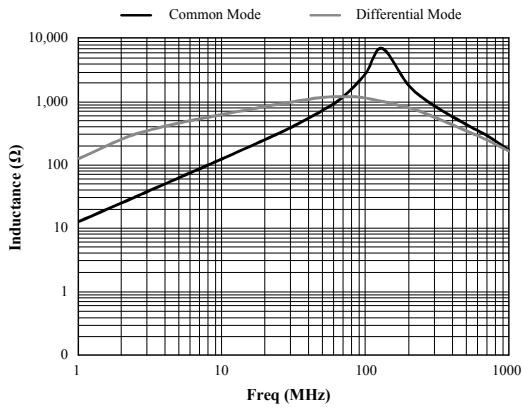
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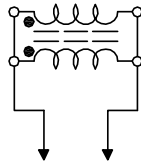
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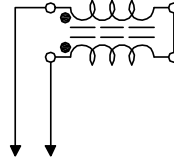
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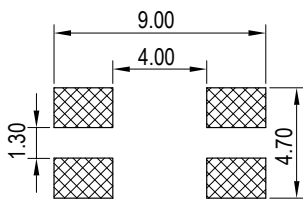
Common Mode
Measuring circuit :



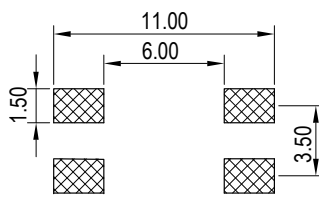
Differential Mode
Measuring circuit :



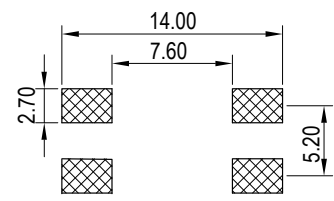
PCB Pattern



AQF7035



AQF9045



AQF1260



Packing Information

Type	Q'TY (pcs)	A (mm)	Unit Weight /pc	Q'TY (pcs)	Size (cm)
SWI0402CT-A1	10,000	178	0.8 mg	200,000	38.5 x 19.5 x 14.5
SWI0603CS-A1	3,000	178	3.7 mg	60,000	38.5 x 19.5 x 14.5
ACC3225	1,000	178	45 mg	50,000	39.5 x 39.5 x 23
ACC4532	500	178	110 mg	20,000	39.5 x 39.5 x 23
MHE0630_T	1,000	330	0.75 g	4,000	38 x 37 x 22
MHE0640_T	1,000	330	1.0 g	4,000	38 x 37 x 22
MHE1040_T	800	330	2.3 g	3,200	38 x 37 x 22
MHE0630_Q	1,000	330	0.75 g	4,000	38 x 37 x 22
MHE1040_Q	800	330	2.3 g	3,200	38 x 37 x 22
MHS0735_S	1,000	330	0.9 g	6,000	38 x 37 x 22
MHS1145_S	800	330	2.79 g	3,200	38 x 37 x 22
MHS0735_E	1,000	330	0.9 g	6,000	38 x 37 x 22
MHS1145_E	800	330	2.79 g	3,200	38 x 37 x 22
MSN3030	700	178	0.1 g	28,000	42 x 41 x 24
MSN4030	600	178	0.2 g	24,000	42 x 41 x 24
MSN5030	600	178	0.31 g	24,000	42 x 41 x 24
MSN5040	1,000	330	0.31 g	8,000	38 x 37 x 22
MSN6045	1,000	330	0.6 g	6,000	38 x 37 x 22
TPI4018CT-A1	3,000	330	115 mg	60,000	38.5 x 37 x 42
TPI6045CT-A1	1,000	330	0.61 mg	16,000	38.5 x 37 x 42
MRN8040	1,200	330	0.9 g	7,200	38 x 37 x 22
AER0403	2,000	330	0.18 g	16,000	38 x 37 x 22
AER0604	1,000	330	0.35 g	6,000	38 x 37 x 22
AER0805	1,000	330	0.81 g	6,000	38 x 37 x 22
MER1006	800	330	1.16 g	3,200	38 x 37 x 22
ASR1011	250	330	3.2 g	1,000	38 x 37 x 22
ASB7030	1,500	330	0.44 g	9,000	38 x 37 x 22
ASB7045	1,000	330	0.6 g	6,000	38 x 37 x 22
ASB1305	600	330	2.35 g	2,400	38 x 37 x 22
ASB1806	250	330	4.0 g	1,000	38 x 37 x 22
ASB2207	250	330	4.4 g	1,000	38 x 37 x 22
AQS3818	1,000	178	0.11 g	40,000	42 x 41 x 24
AQS4818	800	178	0.19 g	32,000	42 x 41 x 24
AQS4828	500	178	0.27 g	20,000	42 x 41 x 24
AQS5818	500	178	0.25 g	15,000	42 x 41 x 24
AQS5828	400	178	0.47 g	12,000	42 x 41 x 24
AQS6822	500	178	0.4 g	15,000	42 x 41 x 24
MQS3228	600	178	0.12 g	24,000	42 x 41 x 24



Packing Information

Type	Q'TY (pcs)	A (mm)	Unit Weight /pc	Q'TY (pcs)	Size (cm)
MQS5228	400	178	0.3 g	12,000	42 x 41 x 24
MQS6828	1,500	330	0.505 g	9,000	38 x 37 x 22
MBS0703	1,500	330	0.63 g	9,000	38 x 37 x 22
MBS0704	1,000	330	0.88 g	6,000	38 x 37 x 22
ASU3028	2,000	330	1.25 g	16,000	38 x 37 x 22
ASU5028	600	178	0.27 g	24,000	42 x 41 x 24
ASU6025	600	178	0.3 g	24,000	42 x 41 x 24
ASU8028	1,500	330	0.61 g	9,000	38 x 37 x 22
ASU8030	400	178	0.62 g	12,000	42 x 41 x 24
ASU8040	1,200	330	0.82 g	7,200	38 x 37 x 22
ASU8045	1,000	330	1.0 g	6,000	38 x 37 x 22
ASU8058	800	330	1.2 g	4,800	38 x 37 x 22
ASU1028	1,000	330	0.9 g	4,000	38 x 37 x 22
ASU1030	1,200	330	0.9 g	4,800	38 x 37 x 22
ASU1038	800	330	1.26 g	3,200	38 x 37 x 22
ASU1040	800	330	1.32 g	3,200	38 x 37 x 22
ASU1048	600	330	1.63 g	2,400	38 x 37 x 22
ASU1050	700	330	1.66 g	2,800	38 x 37 x 22
ASU1065	500	330	2.35 g	2,000	38 x 37 x 22
ASS7032	1,500	330	0.45 g	9,000	38 x 37 x 22
ASS1005	600	330	1.26 g	2,400	38 x 37 x 22
ASS1210	250	330	4.5 g	1,000	38 x 37 x 22
ASS1240	800	330	2.35 g	3,200	38 x 37 x 22
ASS1260	600	330	3.65 g	2,400	38 x 37 x 22
ASS1280	400	330	4.6 g	1,600	38 x 37 x 22
ASS1806	250	330	3.3 g	1,000	38 x 37 x 22
ACU1048	700	330	1.85 g	2,800	38 x 37 x 22
MCU1227	450	330	4.32 g	1,800	38 x 37 x 22
MBF0703	1,500	330	0.6 g	9,000	38 x 37 x 22
ASF1258	400	330	2.95 g	1,600	38 x 37 x 22
ASF1278	400	330	4.1 g	1,600	38 x 37 x 22
MSF3225	1,200	178	70 mg	60,000	41 x 39 x 22
ASF4532-E	500	178	0.15 g	20,000	41 x 39 x 22
ASF4532-C	500	178	0.15 g	20,000	41 x 39 x 22
MSF9050	1,000	330	0.378 g	6,000	38 x 37 x 22
AQF7035	1,200	330	0.4 g	7,200	38 x 37 x 22
AQF9045	1,000	330	0.67 g	6,000	38 x 37 x 22
AQF1260	500	330	2.2 g	2,000	38 x 37 x 22



MEMO



Quality Policy

We insist on the spirit of "service, innovation and seeking for excellent".
Based on the commitment **"I am doing the excellent all the time"**
and participation of everybody.

We provide our customers products with Best Quality,
Quick Delivery and Best Price.

We are committed to quality, continuous R&D innovation, energy saving,
carbon reduction, and green sustainability, and we have launched on "10
Billion in 10 Years Plan" to build a technology industry group with "Annual
Revenue Growing to 10 Billion dollars in 10 years".

品質政策

我們秉持“服務、創新、追求卓越”的精神，透過

“凡經我手最美、最好”

的全員參與，提供品質、交期與價格符合客戶要求的產品。

我們以品質優勢、持續研發創新，奉行節能減碳，綠色永續，
展開「十年百億計畫」，建立 [年營收十年內上百億元] 之科技工業集團。



千如電子集團
ABC-ATEC ELECTRONICS GROUP.



ABC-ATEC Electronics Group

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