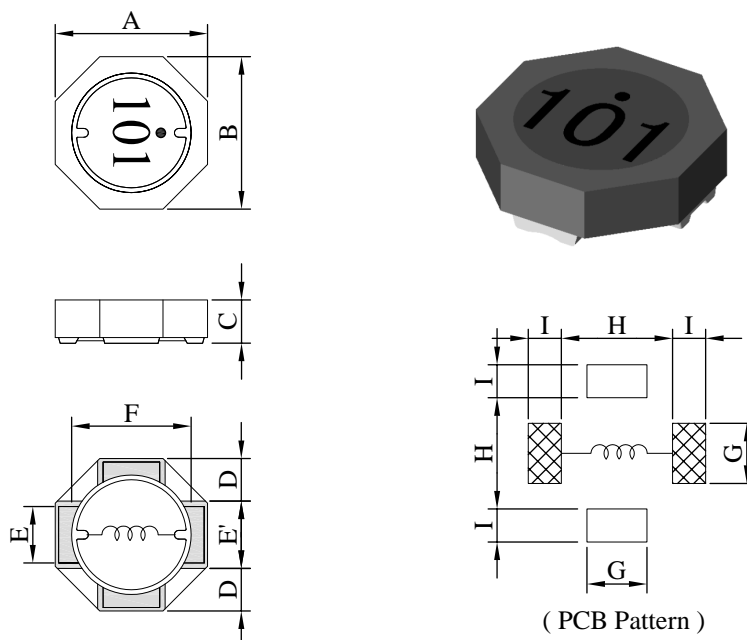


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		SU5016□□□□L□-□□□			
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I . Configuration and dimensions :



Unit : mm

A	B	C	D	E	E'	F	G	H	I
5.20 ±0.20	5.20 ±0.20	1.60 ±0.20	1.60 typ.	1.80 typ.	2.00 ±0.4	3.90 typ.	2.00 ref.	3.70 ref.	1.10 ref.

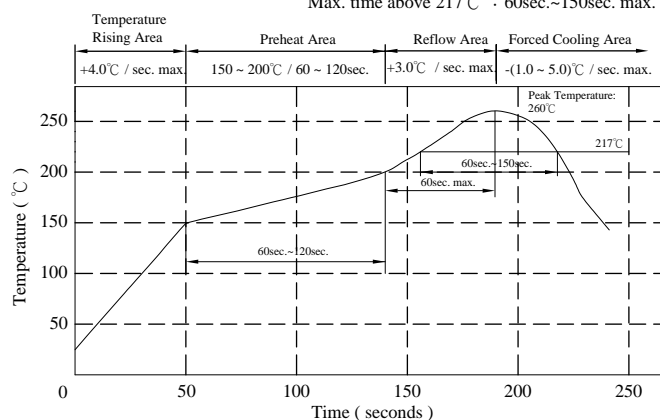
II . Description :

- a . Ferrite drum core construction
- b . Magnetically shielded
- c . Enamelled copper wire : F 、 H class
- d . Product weight : 0.15 g (ref.)
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements
- g . Halogen free

Peak Temp. : 260°C max.
 Max. Peak Temp. - 5°C : 30sec. max.
 Max. time above 217°C : 60sec.~150sec. max.

III . General specification :

- a . Storage temp. : -40°C ----+125°C
- b . Operating temp. : -40°C ----+125°C
(Temp. rise included.)
- c . Resistance to solder heat : 260°C .10 sec.



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SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SU5016□□□□L□-□□□		
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IV . Electrical characteristics :

DWG. No.	Inductance (μ H)	Q ref.	Test Freq. (Hz)		RDC (m Ω)		SRF (MHz)	Irms (mA)	Isat (mA)
			L	Q	typ.	max.	typ.	max.	typ.
SU50161R8YL□-□□□	1.8 \pm 30 %	9.0	100k	7.96M	24	32	100	1750	1700
SU50163R3YL□-□□□	3.3 \pm 30 %	9.0	100k	7.96M	35	48	80	1550	1500
SU50164R7YL□-□□□	4.7 \pm 30 %	9.0	100k	7.96M	43	57	60	1300	1200
SU50166R8YL□-□□□	6.8 \pm 30 %	8.0	100k	7.96M	50	78	50	1200	1100
SU5016100YL□-□□□	10.0 \pm 30 %	15.0	100k	2.52M	84	110	40	1000	900
SU5016150YL□-□□□	15.0 \pm 30 %	15.0	100k	2.52M	130	170	32	800	720
SU5016220YL□-□□□	22.0 \pm 30 %	15.0	100k	2.52M	195	250	28	650	560
SU5016330YL□-□□□	33.0 \pm 30 %	13.0	100k	2.52M	300	375	22	540	500
SU5016470YL□-□□□	47.0 \pm 30 %	18.0	100k	2.52M	390	480	18	460	420
SU5016680YL□-□□□	68.0 \pm 30 %	18.0	100k	2.52M	560	700	15	360	330
SU5016101YL□-□□□	100.0 \pm 30 %	18.0	100k	796k	850	1050	12	300	270

- 1) . Electrical specifications at 25°C
- 2) . Inductance Test Freq. : 100kHz / 0.1V
- 3) . Isat base on Δ L / LOA=35% typ.
- 4) . Irms base on Temp. rise 40°C max.

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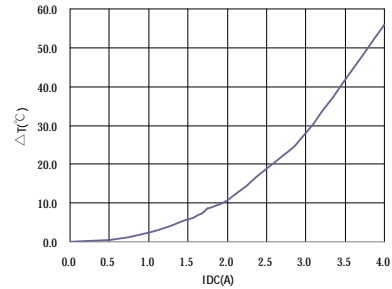
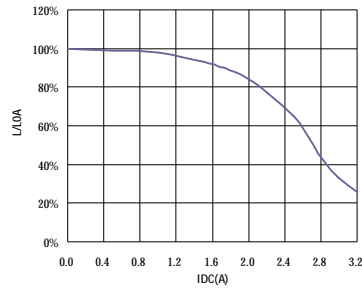
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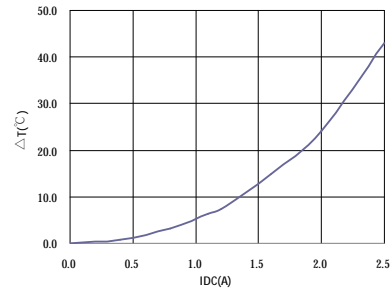
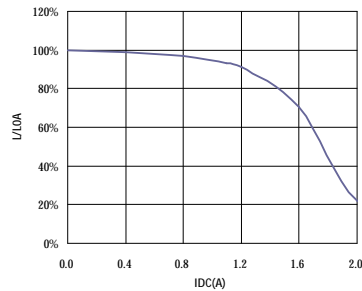
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SU5016□□□□L□-□□□		
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V . Curve :

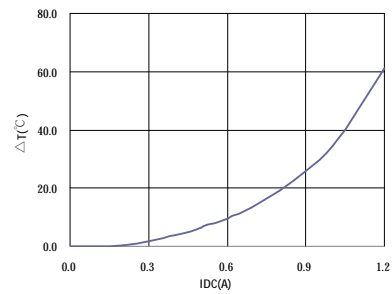
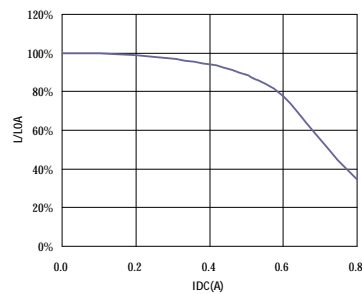
SU50161R8YL□



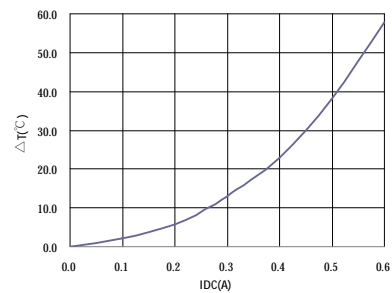
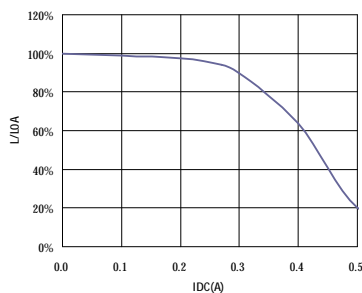
SU50166R8YL□



SU5016330YL□



SU5016101YL□



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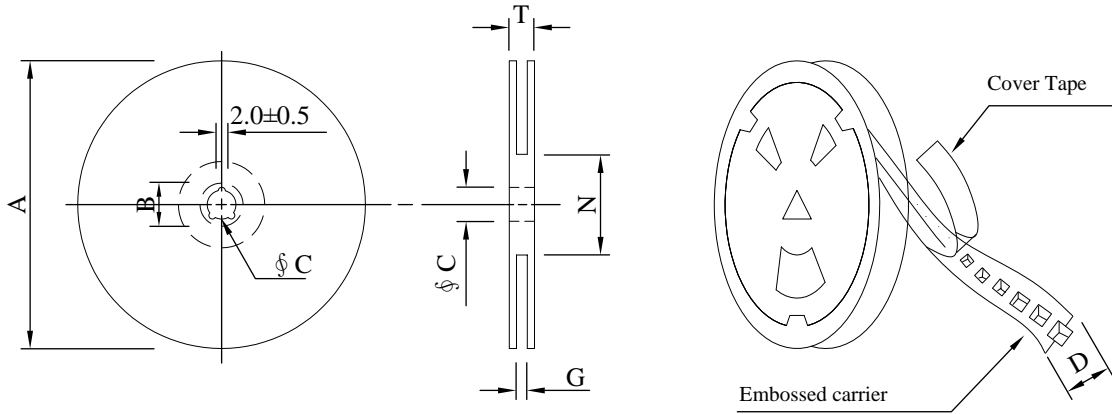
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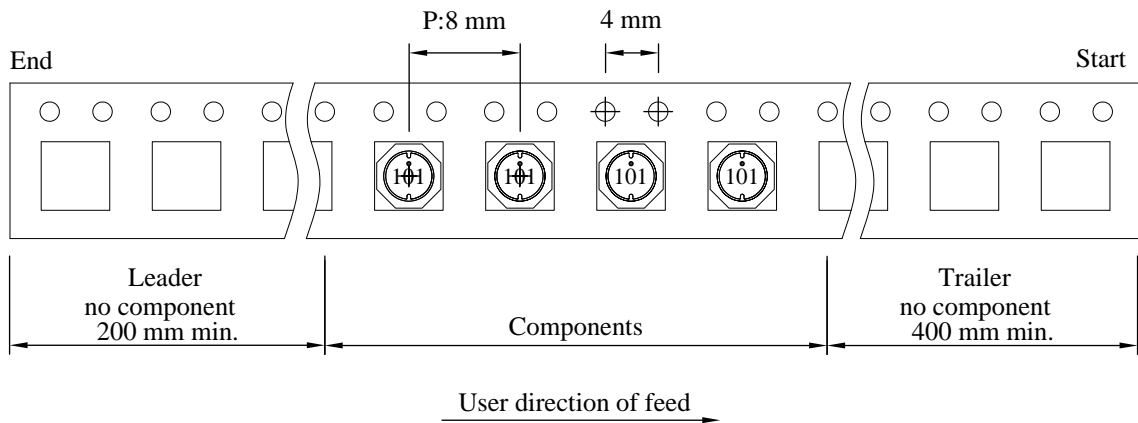
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VI . Packaging information :

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:mm

Style	A	B	C	D	G	N	T
07 - 12	178	21±0.8	13	12	14 ⁺⁰	50 ⁻⁰	16.5

(3) Q'TY & G.W. Per package

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (g)	Style	Q'TY (pcs)	G.W. (kg)	Size (cm)
B	1,000	260	07 - 12	40,000	11.9	42 x 41 x 24

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SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SU5016□□□□L□-□□□		
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VIII . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125±2℃ 2.Time:96±2 hours.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
2.Temperature Cycling	JESD22-A 104	1.Temperature: -40℃ ~ +125℃ 2.Number of cycle:100 cycles 3.Dwell time:30 minutes	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature : 85±2 ℃ 2.Humidity: 85% RH. 3.Time:96±2 Hours	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
4.Operational Life	JESD22-A 108	1.Temperature: 125℃(Temp. rise included) 2.Time:96±2 hours. 3.Rated current	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
5.External Visual	JESD22-B 101 & MIL-STD-883 Method 2009	Inspect product constructions, marking and workmanship.	1.No pollution on the surface of products. 2.Clear marking. 3.No crack.
6.Physical Dimensions	JESD22-B 100	Verify physical dimensions to the applicable product detail specification.	Per product specification standard
7.Resistance to solvents	MIL-STD-202 Method 215	Immerse into solvent for 3±0.5 minutes & brush 10 times for 3 cycles.	1.No body change in appearance. 2.No marking blurred. 3.Inductance shall not change more than ±20%.
8.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitued : 10-2000-10 Hz, 1.5 mm. 2.Direction:X, Y, Z 3.Test duration:2 hours for each direction, 6 hours in total.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210 & J-STD020D.1	1.Highest temperature : 260±5℃. 2.Time (temp. ≥ 217℃) : 60~150 Seconds. 3.IR reflow times : 3 times.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
10.Saturation Current	JIS C 6436 & User SPEC.	1.Applied rated current for 5 seconds. 2.Saturation current	Inductance shall not drop more than 35% typ.
11.Over load	JIS C 6436 & User SPEC.	1.Applied one and half rated current for a period of 5 minutes. 2.Rated current	No electrical or mechanical damage
12.Temperature Rise Current	JIS C 6436 & User SPEC.	1.Applied rated current for 10 minutes. 2.Temperature measure by digital surface thermometer. 3.Irms current	Surface temperature rise is less than 40℃ max.
13.Solderability Test	J-STD-002 & JESD22-B 102	1.Baking in pre-testing : 150±5℃ / 16Hours±30 min. 2.Peak temperature : 240±5℃ 3.Time (temp. ≥ 217℃) : 60~150 seconds. 4.IR reflow times : 1 time.	More than 95% soldering coverage min on terminations.
14.Electrical Characteriazation	MIL-STD-202 Method 304 & User SPEC.	1.Operating temperature : -40℃~125℃ 2.Room temperature : 25℃.	1.No mechanical or electrical damage. 2.Inductance shall not change more than ±20%.
15.Drop	CNS-C6354 & GB/T 2423.8	1.Products shall be mounted on SPEC. PCB and dropped down from a height of 1m 2.Drop total time : 6 times (Every side of sample drop 2 times)	1. Adhesion on PCB shall be enough. 2. Product appearance shall not break. 3. No electrical damage.
16.Terminal Strength Test	IEC 60068-2-21	1.Apply push force to samples mounted on PCB. 2.Force of 1.8 kg for 60±1 seconds.	After test, inductors shall be no mechanical damage.

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