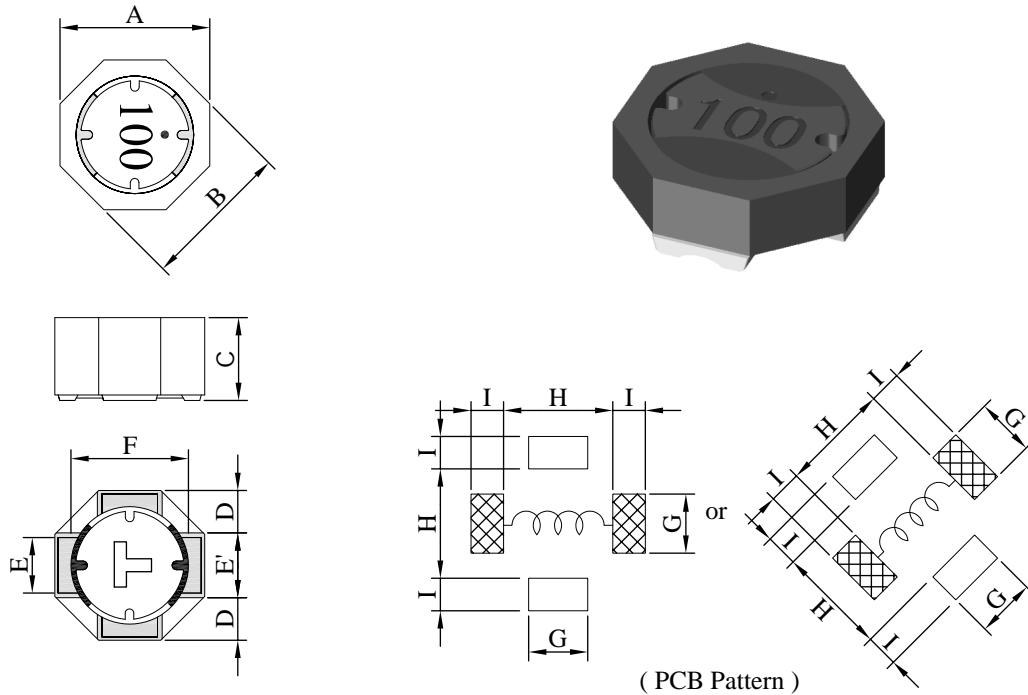


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SU8030□□□□F□-□□□		
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I . Configuration and dimensions :



(PCB Pattern)

Unit : mm

A	B	C	D	E	E'	F	G	H	I
8.00 ±0.3	8.00 ±0.3	2.80 ±0.3	2.20 typ.	3.20 typ.	3.70 ±0.5	6.40 typ.	3.40 ref.	6.20 ref.	1.40 ref.

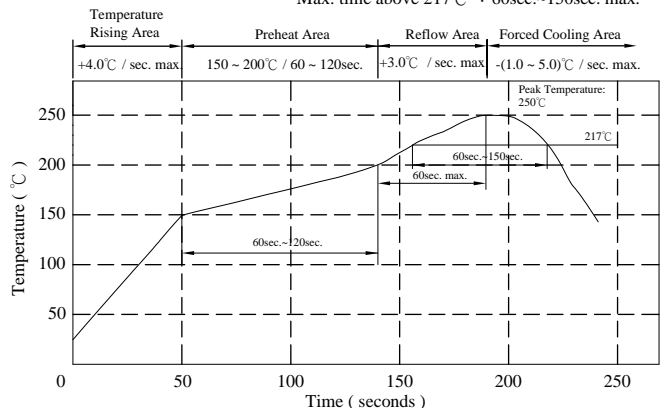
II . Description :

- a . Ferrite drum core construction
- b . Magnetically shielded
- c . Enamelled copper wire : F · H class
- d . Product weight : 0.62 g (ref.)
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements
- g . Halogen free

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.

Peak Temp. : 250°C max.
Max. Peak Temp. - 5°C : 30sec. max.
Max. time above 217°C : 60sec.~150sec. max.



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IV . Electrical characteristics :

DWG No.	Inductance (μ H)	Q ref.	Test Freq. (Hz)		SRF (MHz) typ.	RDC (m Ω)		Irms (A) typ.	Isat (A) typ.
			L	Q		typ.	max.		
SU80303R3YF□-□□□	3.3 \pm 30%	12	100k	7.96M	55.0	15.6	22.0	5.00	4.60
SU80304R7YF□-□□□	4.7 \pm 30%	10	100k	7.96M	42.0	22.0	30.0	4.60	3.80
SU80306R8YF□-□□□	6.8 \pm 30%	10	100k	7.96M	30.0	34.5	46.0	3.60	3.20
SU8030100YF□-□□□	10.0 \pm 30%	18	100k	2.52M	25.0	47.3	60.0	3.00	2.60
SU8030150YF□-□□□	15.0 \pm 30%	18	100k	2.52M	20.0	75.0	100.0	2.20	2.00
SU8030220YF□-□□□	22.0 \pm 30%	18	100k	2.52M	16.0	105.0	130.0	2.00	1.75
SU8030330YF□-□□□	33.0 \pm 30%	16	100k	2.52M	14.0	144.0	180.0	1.60	1.45
SU8030470YF□-□□□	47.0 \pm 30%	16	100k	2.52M	12.0	205.0	260.0	1.45	1.25
SU8030680YF□-□□□	68.0 \pm 30%	16	100k	2.52M	9.0	250.0	315.0	1.25	0.96
SU8030101YF□-□□□	100.0 \pm 30%	24	100k	0.796M	7.0	415.0	520.0	0.85	0.75

- 1). Electrical specifications at 25°C
- 2). Inductance Test Freq. : 100kHz / 0.1V
- 3). Isat base on Δ L / L0A=35% typ.
- 4). Irms base on Temp. rise 40°C typ.

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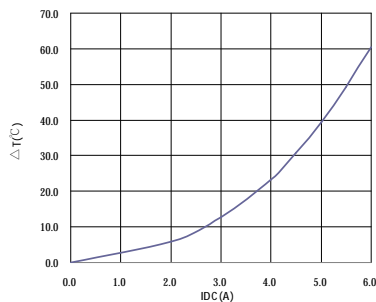
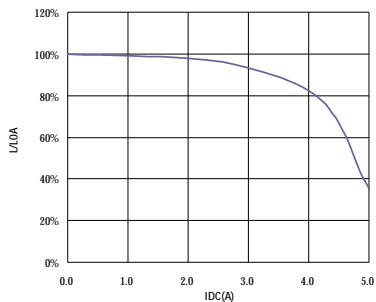
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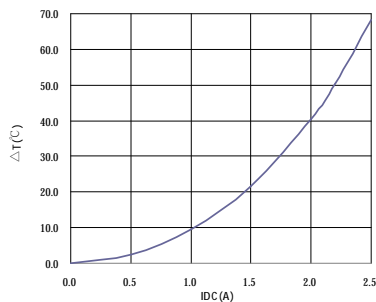
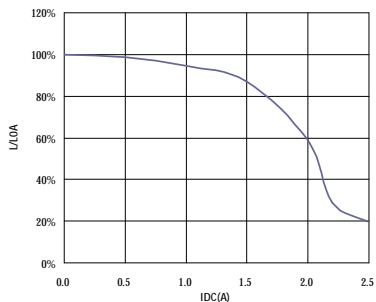
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SU8030□□□□F□-□□□		
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V . Curve :

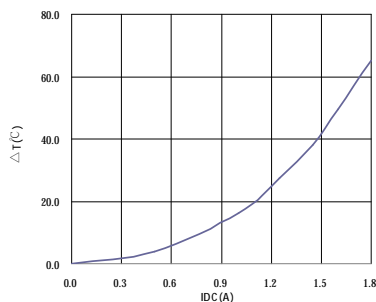
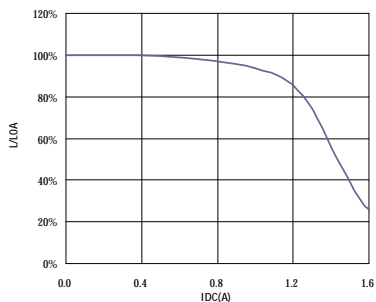
SU80304R7YF□



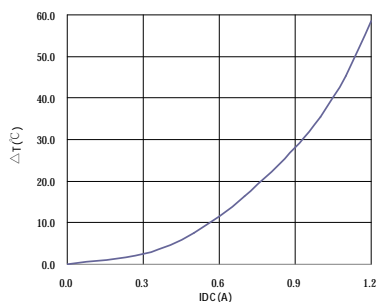
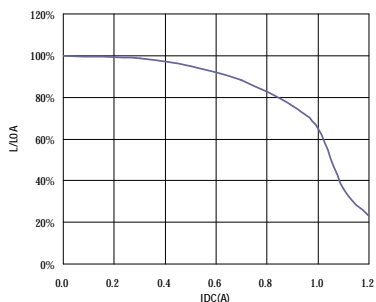
SU8030220YF□



SU8030470YF□



SU8030101YF□



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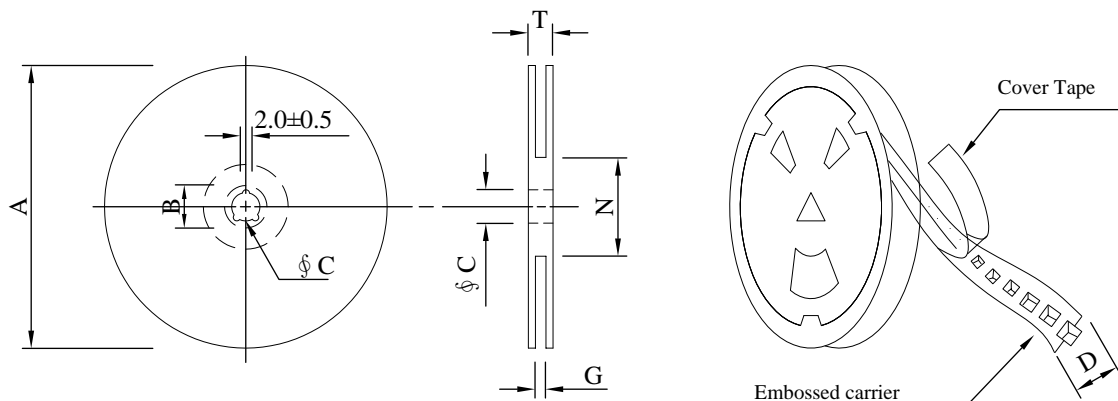
SPECIFICATION FOR APPROVAL

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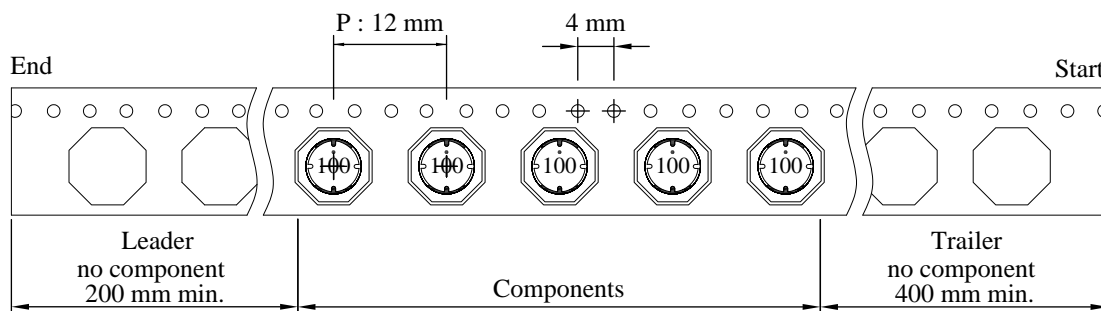
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VI . Packaging information :

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:mm

Style	A	B	C	D	G	N	T
07 - 16	178	21±0.8	13	16	18 ⁺⁰	50 ⁻⁰	20.5
13 - 16	330	21±0.8	13±0.5	16	18 ⁺⁰	50 ⁻⁰	22.4

(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	400	360	07 - 16	12,000	12.2	42 x 41 x 24
C	1,500	1330	13 - 16	9,000	9.3	38 x 37 x 22

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千如電子集團
ABC-ATEC ELECTRONICS GROUP

SPECIFICATION FOR APPROVAL

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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 cycle 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 apperance. 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 : 250±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℃ typ.
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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