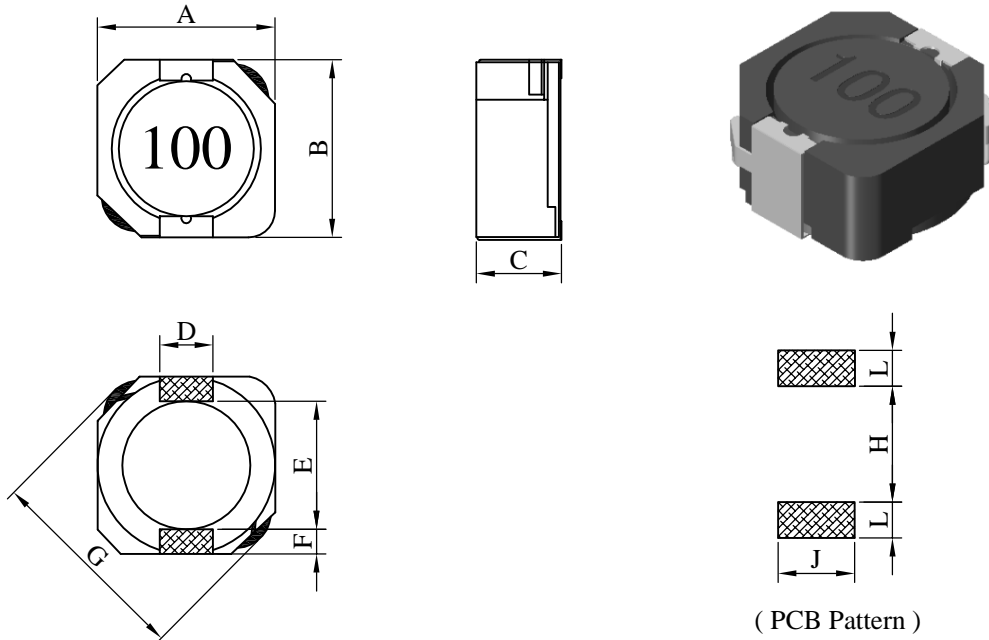


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		CU1206□□□□L□-□□□	
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I . Configuration and dimensions :



(PCB Pattern)

Unit : m/m

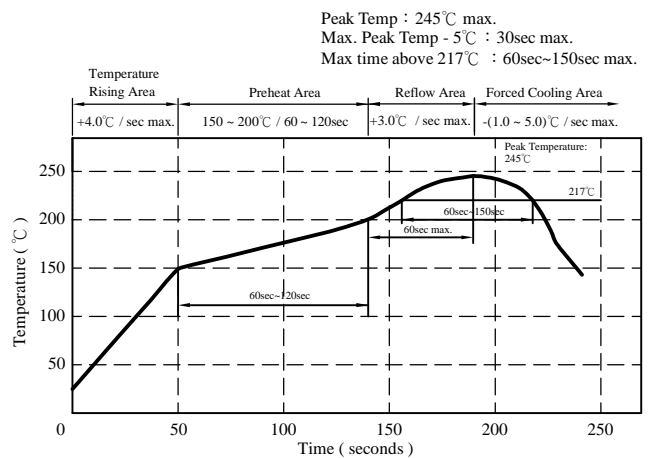
A	B	C	D	E	F	G	H	J	L
12.00 ±0.4	12.40 ±0.4	5.80 ±0.3	3.60 ±0.3	9.80 ±0.4	1.30 ±0.3	14.50 ref.	8.80 ref.	3.80 ref.	1.70 ref.

II . Description :

- a . Ferrite drum core construction.
- b . Magentically shielded.
- c . Enamelled copper wire : H class
- d . Product weight : 3.15g (ref.)
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements
- g . Halogen free available.

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 : 245°C .10 secs.



SPECIFICATION FOR APPROVAL

REF. :

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IV . Electrical characteristics :

DWG No.	Inductance (μ H)	R.D.C. ($m\Omega$)		Isat (A) typ.	Irms (A) typ.
		typ.	max.		
CU12061R5ML□-□□□	1.5 \pm 20%	4.7	6.2	9.50	11.50
CU12063R9ML□-□□□	3.9 \pm 20%	8.3	11.0	7.50	8.00
CU12065R6ML□-□□□	5.6 \pm 20%	9.6	13.0	6.50	7.50
CU12067R6ML□-□□□	7.6 \pm 20%	11.6	15.0	5.80	6.80
CU1206100ML□-□□□	10.0 \pm 20%	14.9	20.0	5.20	6.00
CU1206120ML□-□□□	12.0 \pm 20%	16.6	22.0	4.65	5.60
CU1206150ML□-□□□	15.0 \pm 20%	20.4	27.0	4.20	5.00
CU1206180ML□-□□□	18.0 \pm 20%	23.6	31.0	3.80	4.70
CU1206220ML□-□□□	22.0 \pm 20%	24.5	33.0	3.50	4.50
CU1206270ML□-□□□	27.0 \pm 20%	34.0	44.0	3.10	3.80
CU1206330ML□-□□□	33.0 \pm 20%	39.7	52.0	2.80	3.60
CU1206390ML□-□□□	39.0 \pm 20%	42.7	56.0	2.65	3.45
CU1206470ML□-□□□	47.0 \pm 20%	52.5	68.0	2.30	3.10
CU1206560ML□-□□□	56.0 \pm 20%	63.4	83.0	2.00	2.80
CU1206680ML□-□□□	68.0 \pm 20%	70.0	91.0	1.85	2.60
CU1206820ML□-□□□	82.0 \pm 20%	87.1	115.0	1.70	2.30
CU1206101ML□-□□□	100.0 \pm 20%	99.1	130.0	1.50	2.15
CU1206121ML□-□□□	120.0 \pm 20%	118.3	160.0	1.40	1.95
CU1206151ML□-□□□	150.0 \pm 20%	159.5	210.0	1.20	1.65
CU1206181ML□-□□□	180.0 \pm 20%	194.0	250.0	1.10	1.50
CU1206221ML□-□□□	220.0 \pm 20%	219.0	270.0	1.00	1.40
CU1206271ML□-□□□	270.0 \pm 20%	275.0	330.0	0.95	1.20
CU1206331ML□-□□□	330.0 \pm 20%	305.0	360.0	0.90	1.10
CU1206391ML□-□□□	390.0 \pm 20%	349.0	420.0	0.85	1.00
CU1206471ML□-□□□	470.0 \pm 20%	428.0	520.0	0.75	0.95
CU1206561ML□-□□□	560.0 \pm 20%	541.0	650.0	0.70	0.85
CU1206681ML□-□□□	680.0 \pm 20%	677.0	780.0	0.65	0.75
CU1206821ML□-□□□	820.0 \pm 20%	767.0	880.0	0.55	0.70
CU1206102ML□-□□□	1000.0 \pm 20%	1005.0	1100.0	0.50	0.60

- 1). □ : Packaging information : □ Code
- 2). "- □□□ " : Reference code
- 3). Electrical specifications at 25°C
- 4). Inductance Test Condition. : 100KHz / 0.1V
- 5). Irms base on Temp. rise 40°C typ.
- 6). Isat base on $\Delta L/L0A = 35\%$ typ.

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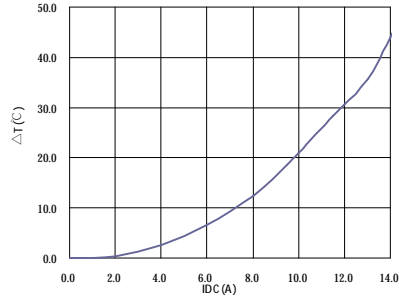
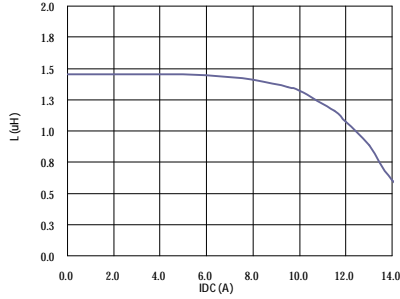
SPECIFICATION FOR APPROVAL

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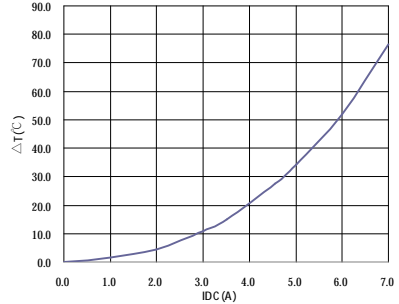
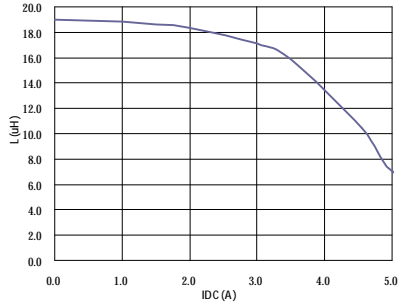
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	CU1206□□□□L□-□□□		
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V . Curve :

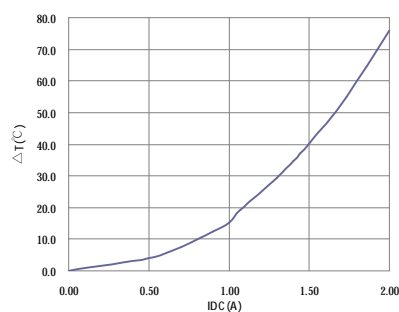
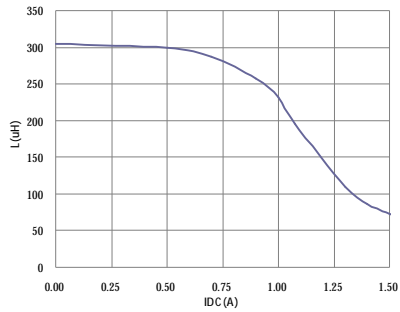
CU12061R5ML□



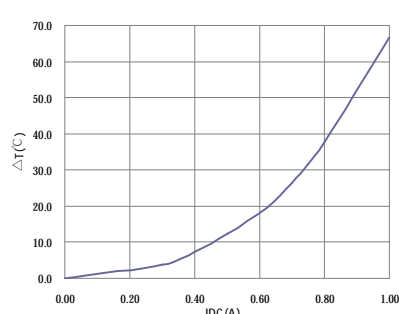
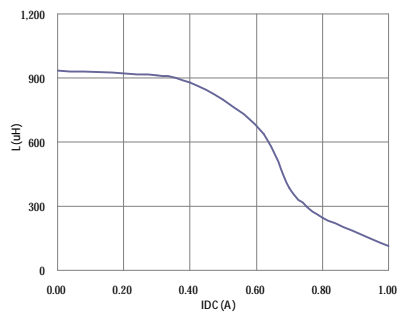
CU1206220ML□



CU1206331ML□



CU1206102ML□



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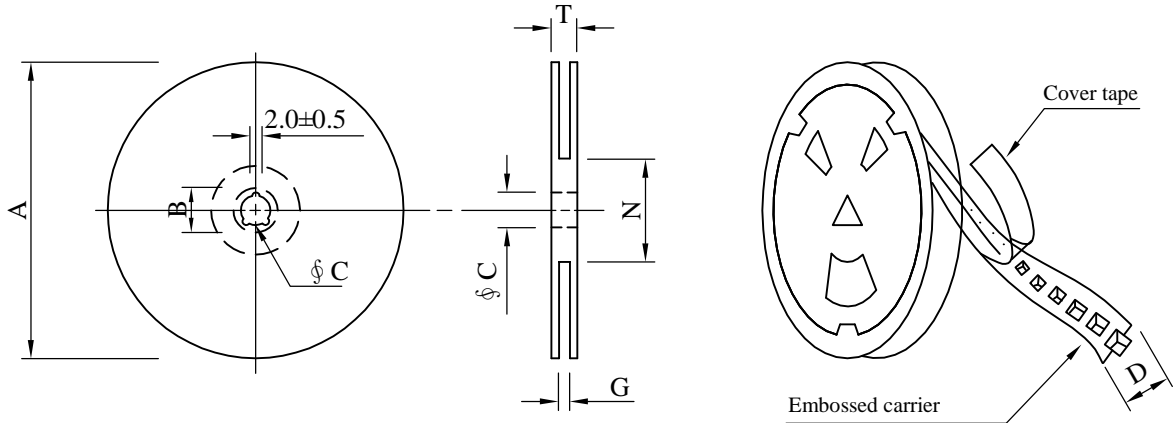
SPECIFICATION FOR APPROVAL

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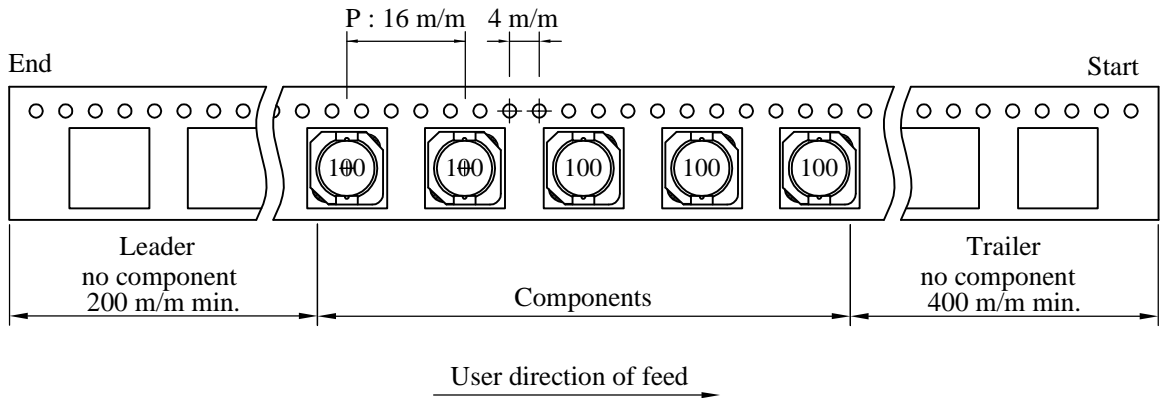
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		CU1206□□□□L□-□□□	
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VI . Packaging information :

(1) Configuration



※Carrier tape width : D



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 24	330	21±0.8	13±0.5	24	26 ⁺⁰	60 ⁻⁰	30.4

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

Code	Inner : Reel			Outer : Carton		
	Q'TY (pcs)	G.W. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
B	600	2200	13 - 24	2,400	11.0	38 x 37 x 22

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SPECIFICATION FOR APPROVAL

REF. :

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VII . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125°C 2.Time:96 hours.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
2.Temperature Cycling	JESD22 Method JA-104	1.Temperature: -40°C ~ 125°C 2.Number of cycle:96 cycle 3.Dwell time:30 minutes	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
3.Biased Humidity Test	MIL-STD-202 Method 103	1.Temperature: 85±5 °C 2.Time:96 Hours 3.Humidity: 85±5% RH.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
4.Operational Life	MIL-PRF-27	1.Temperature: 125°C 2.Time:96 hours. 3.Apply rated current.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
5.External Visual	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 Method JB-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 apperarence. 2.No marking blurred. 3.Inductance shall not change more than ±20%.
8.Vibration Test	MIL-STD-202 Method 204	1.Frequency and Amplitud : 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 and electrical damage. 2.Inductance shall not change more than ±20%.
9.Resistance To Soldering Heat Test	MIL-STD-202 Method 210	1.Highest temperature : 245±5°C 2.Time (temp. ≥ 217°C) : 60~150 Second. 3.IR reflow times : 3 times.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
10.Rated current	MIL-STD-202 Method 330	Apply rated current for 5 second.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
11.Temperature rise	MIL-PRF-27	Apply rated current for 10 minutes.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
12.Over load	MIL-PRF-27	Apply double as rated current for 5 minutes. (It's not application to some special design)	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
13.Solderability Test	J-STD-002	1.Baking in pre-testing : 155±5°C / 16Hours±30 min. 2.Peak temperature : 240±5°C 3.Time (temp. ≥ 217°C) : 60~150 second. 4.IR reflow times : 1 times.	The terminal shall be at least 95% covered with fresh solder.
14.Electrical Characteriazation	User Spec.	1.Operating temperature : -40°C~125°C 2.Room temperature : 25°C.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
15.Withstanding Voltage Test	MIL-STD-202 Method 201	1.DC:500V 2.Time:1minutes	1.During the test no breakdown. 2.The characteristic is normal after test.
16.Drop	JESD22-B111	Packaged & Drop down from 1m.In 1 angle 1ridges & 2 surfaces orientation.	1.No case deformation or change in appearance. 2.Inductance shall not change more than ±20%.
17.Terminal Strength Test	JIS-C-6429	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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