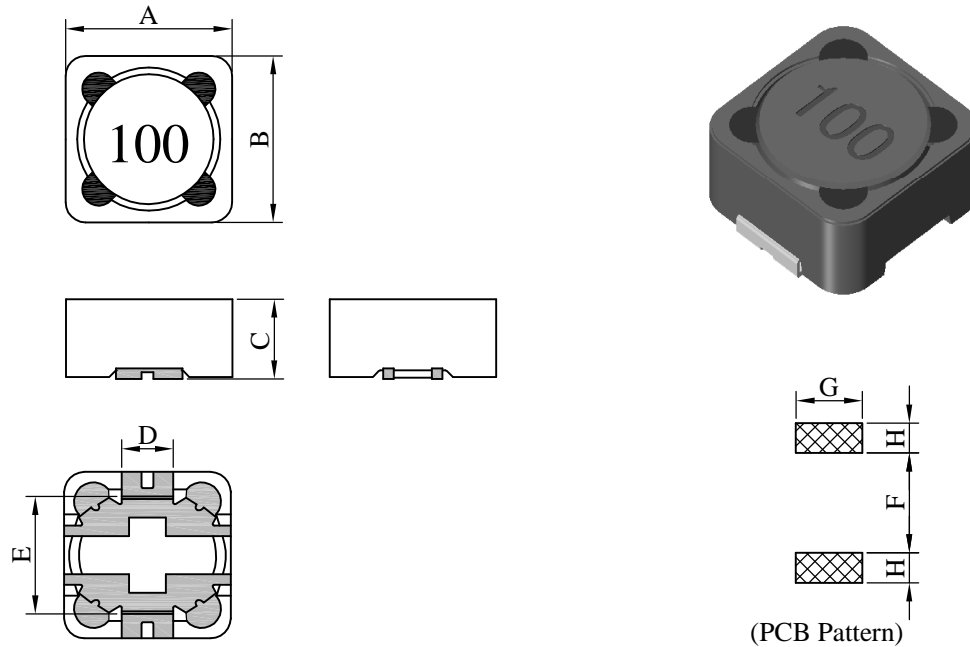


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	CS1206□□□□L□-□□□		
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I . Configuration and dimensions :



Unit : m/m

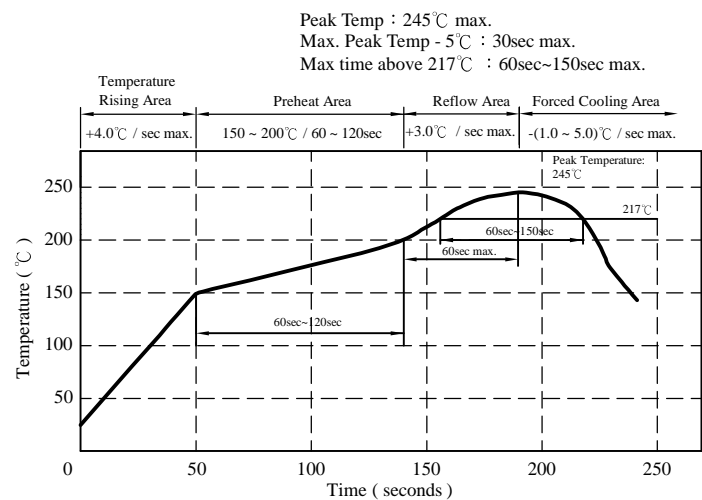
A	B	C	D	E	F	G	H
12.50±0.3	12.50±0.3	6.00±0.5	4.90 typ.	7.90 typ.	7.30 typ.	5.30 ref.	2.80 ref.

II . Description :

- a . Ferrite drum core construction.
- b . Magnetically shielded.
- c . Enamelled copper wire : F & H class
- d . Product weight : 3.10 g (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.



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IV . Electrical characteristics :

DWG No.	Inductance (μ H)	RDC(m Ω)		Isat (A)	Irms (A)
		ref.	max.		
CS1206100ML□-□□□	10 \pm 20%	24.9	35	5.50	4.80
CS1206120ML□-□□□	12 \pm 20%	26.9	38	5.00	4.30
CS1206150ML□-□□□	15 \pm 20%	29.2	41	4.60	4.00
CS1206180ML□-□□□	18 \pm 20%	35.9	51	3.90	4.00
CS1206220ML□-□□□	22 \pm 20%	38.2	54	3.70	3.80
CS1206270ML□-□□□	27 \pm 20%	43.8	62	3.30	3.00
CS1206330ML□-□□□	33 \pm 20%	67.9	95	2.80	2.50
CS1206390ML□-□□□	39 \pm 20%	70.9	100	2.70	2.40
CS1206470ML□-□□□	47 \pm 20%	103.0	135	2.50	2.20
CS1206560ML□-□□□	56 \pm 20%	111.0	145	2.20	2.00
CS1206680ML□-□□□	68 \pm 20%	124.0	160	2.10	2.00
CS1206820ML□-□□□	82 \pm 20%	142.0	185	1.90	1.70
CS1206101ML□-□□□	100 \pm 20%	180.0	235	1.70	1.50
CS1206121KL□-□□□	120 \pm 10%	201.0	260	1.65	1.40
CS1206151KL□-□□□	150 \pm 10%	247.0	320	1.55	1.30
CS1206181KL□-□□□	180 \pm 10%	272.0	350	1.40	1.20
CS1206221KL□-□□□	220 \pm 10%	361.0	460	1.30	1.10
CS1206271KL□-□□□	270 \pm 10%	404.0	520	1.20	1.00
CS1206331KL□-□□□	330 \pm 10%	530.0	690	1.10	0.90
CS1206391KL□-□□□	390 \pm 10%	680.0	880	1.00	0.80
CS1206471KL□-□□□	470 \pm 10%	766.0	995	0.90	0.70
CS1206561KL□-□□□	560 \pm 10%	1002.0	1200	0.80	0.65
CS1206681KL□-□□□	680 \pm 10%	1140.0	1360	0.75	0.63
CS1206821KL□-□□□	820 \pm 10%	1390.0	1660	0.63	0.50
CS1206102KL□-□□□	1000 \pm 10%	1720.0	2050	0.60	0.50

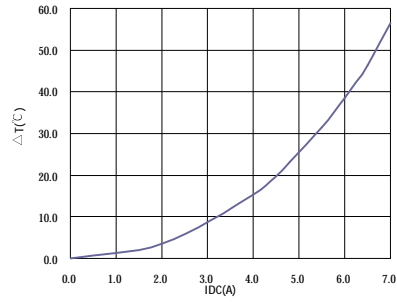
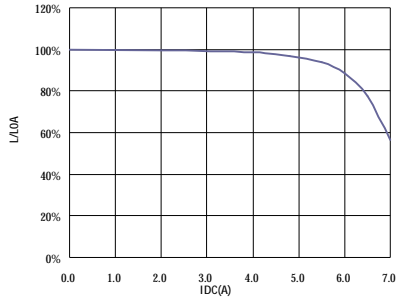
- 1). □ : Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). Irms base on Temp. rise 40°C typ.
- 5). Isat base on $\Delta L/L0A=25\%$ typ.
- 6). L Test Condition : 1 kHz / 0.1V

SPECIFICATION FOR APPROVAL

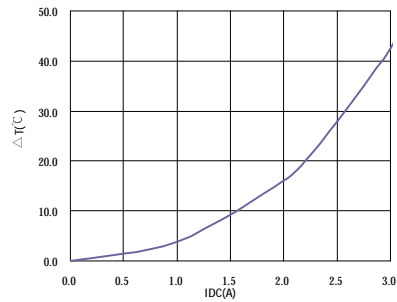
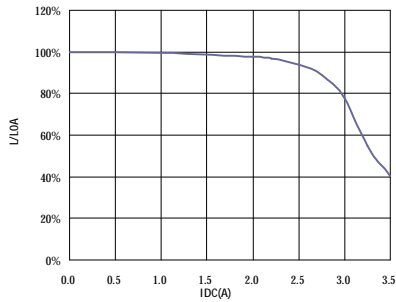
REF. :

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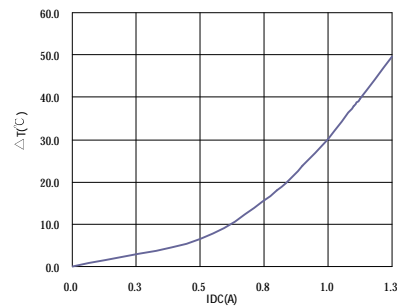
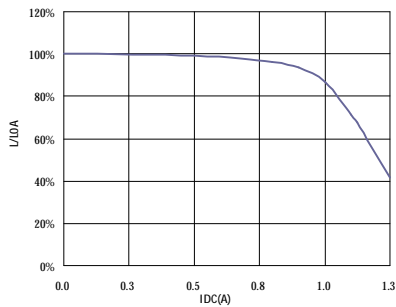
V . Curve :
CS1206100ML□



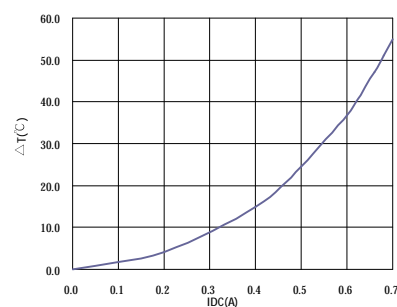
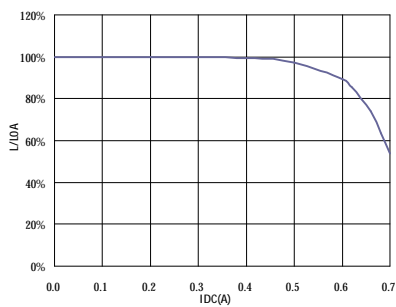
CS1206470ML□



CS1206391KL□



CS1206102KL□



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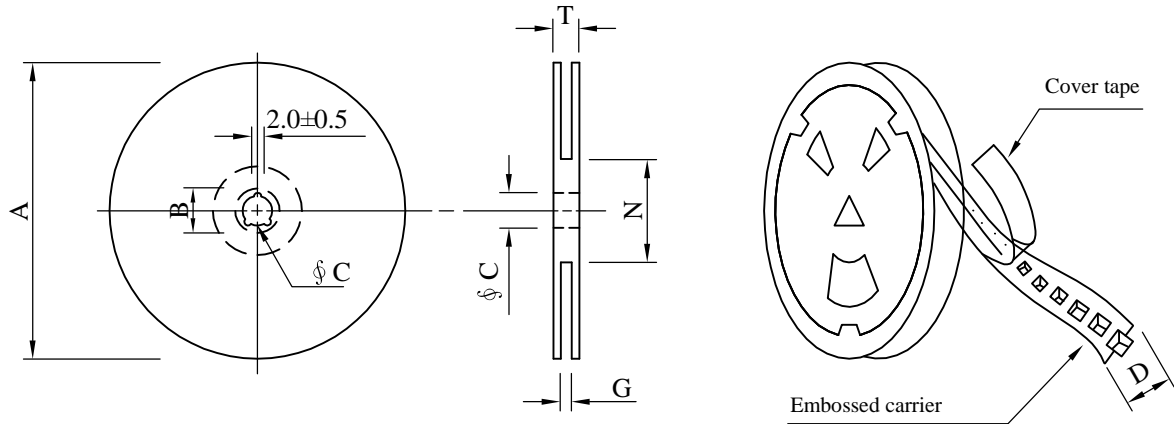
SPECIFICATION FOR APPROVAL

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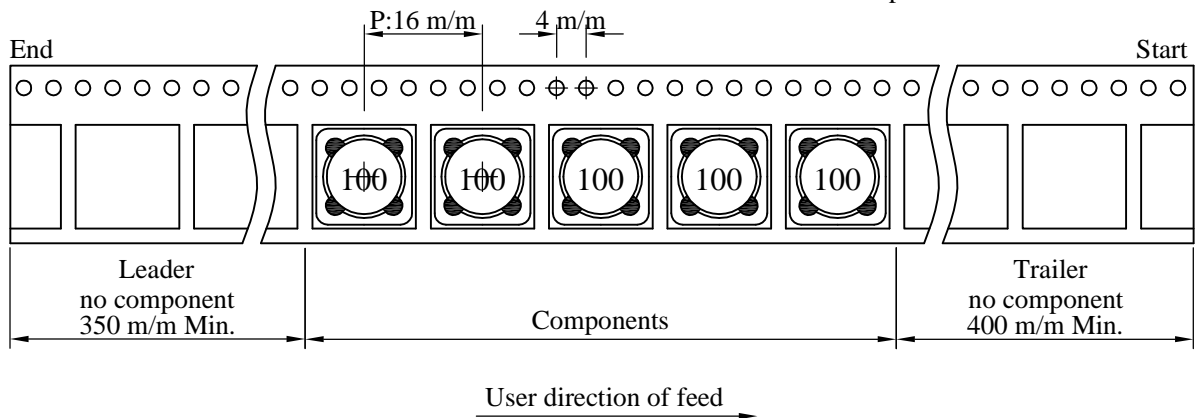
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		REV.	20160901-E	PAGE	4

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	2,310	13 - 24	2,400	10.5	38 x 37 x 22

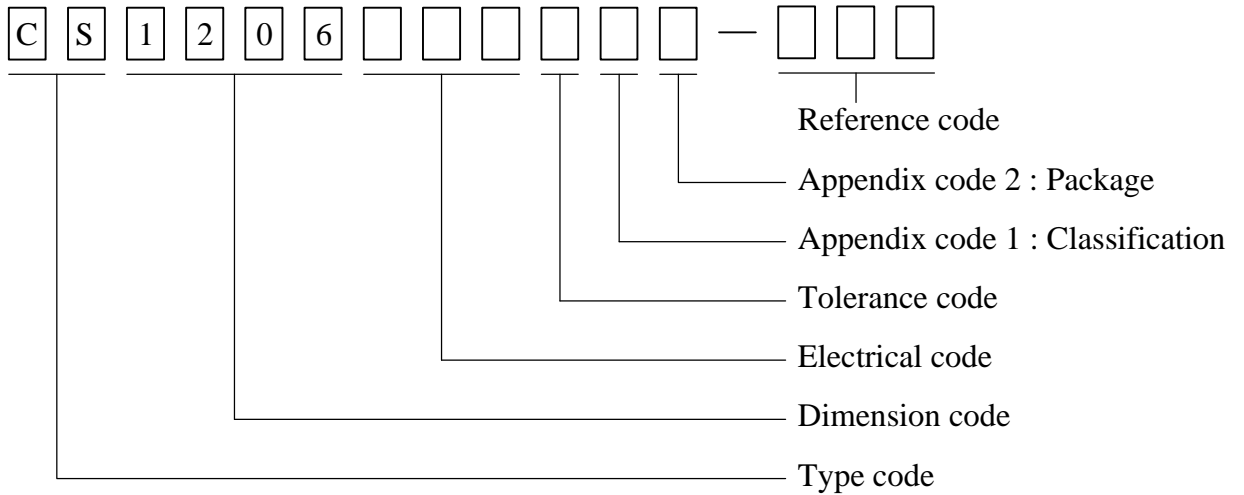
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VII . Drawing number expression :



Appendix code 1 : Product Classification

Appendix code 2 : Package Information

Code	Inner package	Cover tape	Carrier tape	Bag	Package Q'TY	Remark
B	T/R (Reel package)	UCT	Antistatic	Antistatic	600 pcs	

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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 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 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 : 245±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 25% 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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