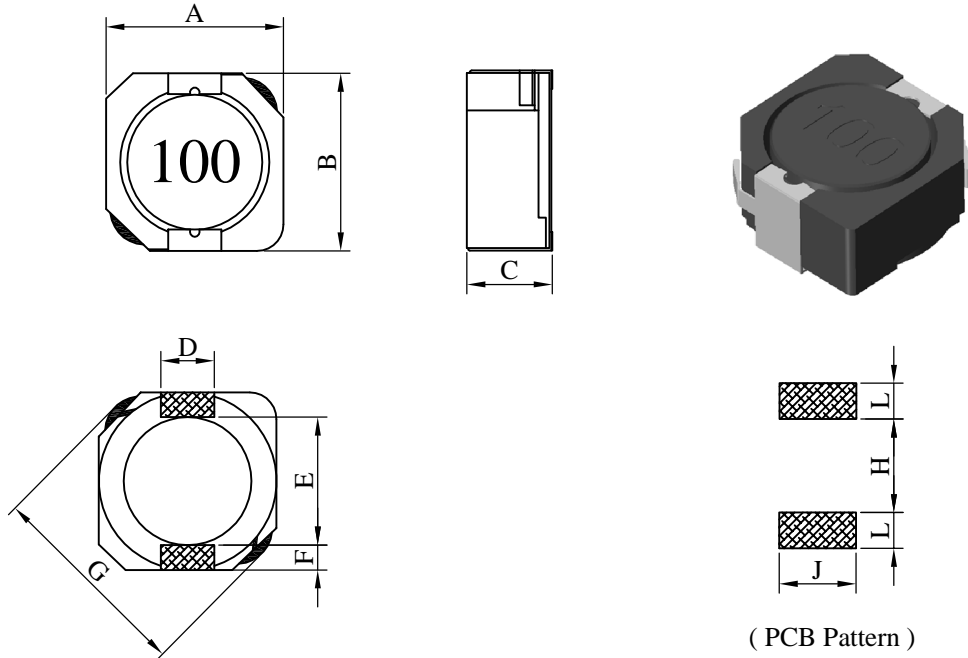


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	CU1038□□□□L□-□□□		
		REV.	20150526-B	PAGE	1

I . Configuration & dimensions :



(PCB Pattern)

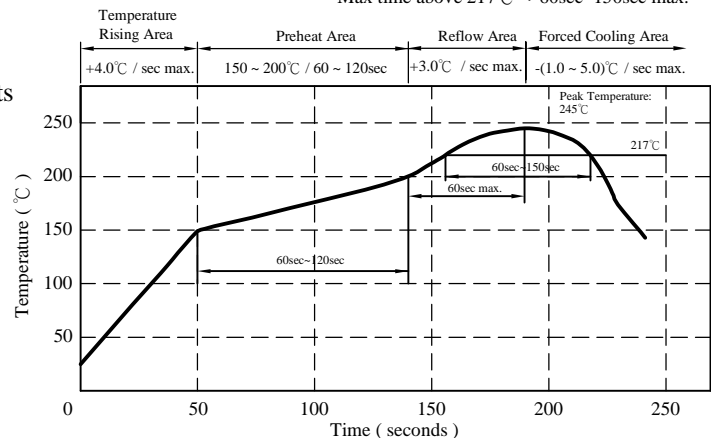
Unit : m/m

A	B	C	D	E	F	G	H	J	L
10.0 ±0.3	10.2 ±0.3	3.80 ±0.3	3.00 ±0.3	7.80 ±0.3	1.20 ±0.15	13.5 ref.	7.30 ref.	3.20 ref.	1.60 ref.

II . Description :

- a . Ferrite drum core construction.
- b . Magentically shielded.
- c . Enamelled copper wire : H class
- d . Product weight : 2.6 g (ref.)
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements
- g . Halogen free available

Peak Temp : 245°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 include)
- c . Resistance to solder heat : 245°C .10 secs.

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	CU1038□□□□L□-□□□		
		REV.	20150526-B	PAGE	2

IV . Electrical Characteristics :

DWG No.	Inductance (μ H)	RDC ($m\Omega$)		Isat (A) typ.	Irms (A) typ.
		typ.	max.		
CU10383R3YL□-□□□	3.3 \pm 30%	10.6	14.0	8.00	7.00
CU10385R6YL□-□□□	5.6 \pm 30%	18.4	24.0	6.00	5.00
CU1038100YL□-□□□	10.0 \pm 30%	30.5	40.0	4.40	4.00
CU1038120YL□-□□□	12.0 \pm 30%	36.0	47.0	4.10	3.70
CU1038150YL□-□□□	15.0 \pm 30%	40.7	53.0	3.80	3.50
CU1038180YL□-□□□	18.0 \pm 30%	49.0	64.0	3.50	3.00
CU1038220YL□-□□□	22.0 \pm 30%	60.5	80.0	3.10	2.70
CU1038270YL□-□□□	27.0 \pm 30%	70.0	92.0	2.60	2.50
CU1038330YL□-□□□	33.0 \pm 30%	84.0	110.0	2.50	2.20
CU1038390YL□-□□□	39.0 \pm 30%	106.0	138.0	2.30	2.00
CU1038470YL□-□□□	47.0 \pm 30%	118.0	147.5	2.10	1.80
CU1038560YL□-□□□	56.0 \pm 30%	150.0	187.0	1.90	1.60
CU1038680YL□-□□□	68.0 \pm 30%	172.0	215.0	1.80	1.50
CU1038820YL□-□□□	82.0 \pm 30%	200.0	250.0	1.60	1.40
CU1038101YL□-□□□	100.0 \pm 30%	260.0	324.5	1.50	1.25
CU1038121YL□-□□□	120.0 \pm 30%	310.0	386.0	1.30	1.10
CU1038151YL□-□□□	150.0 \pm 30%	360.5	450.0	1.20	1.00
CU1038181YL□-□□□	180.0 \pm 30%	450.0	560.0	1.10	0.90
CU1038221YL□-□□□	220.0 \pm 30%	555.0	694.0	1.00	0.80
CU1038271YL□-□□□	270.0 \pm 30%	680.0	817.5	0.90	0.70
CU1038331YL□-□□□	330.0 \pm 30%	850.0	1020.0	0.80	0.60

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

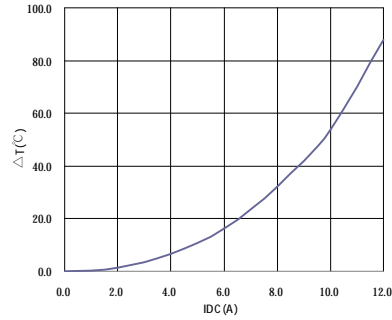
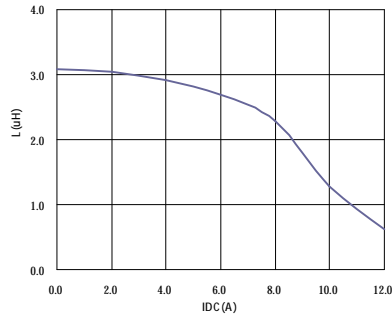
SPECIFICATION FOR APPROVAL

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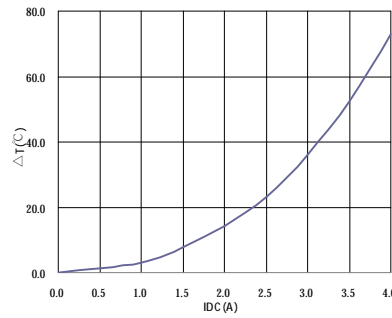
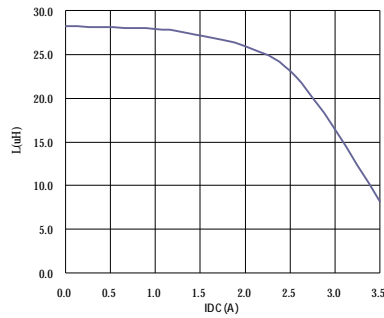
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	CU1038□□□□L□-□□□		
		REV.	20150526-B	PAGE	3

V . Curve :

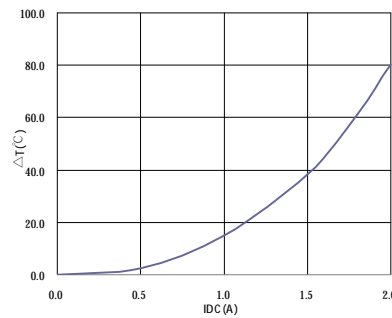
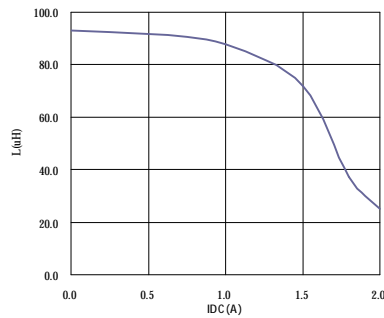
CU10383R3YL□



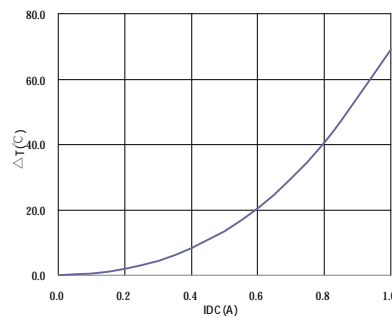
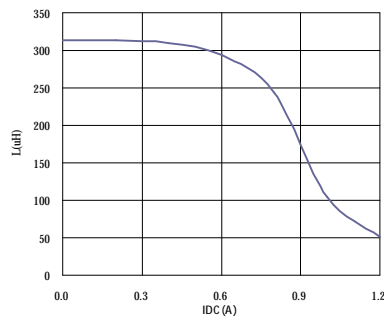
CU1038270YL□



CU1038101YL□



CU1038331YL□



AR-001C

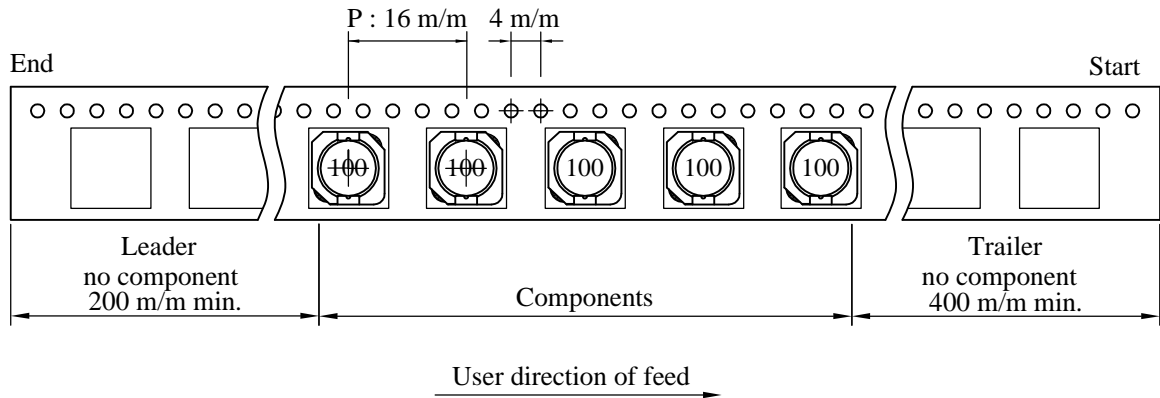
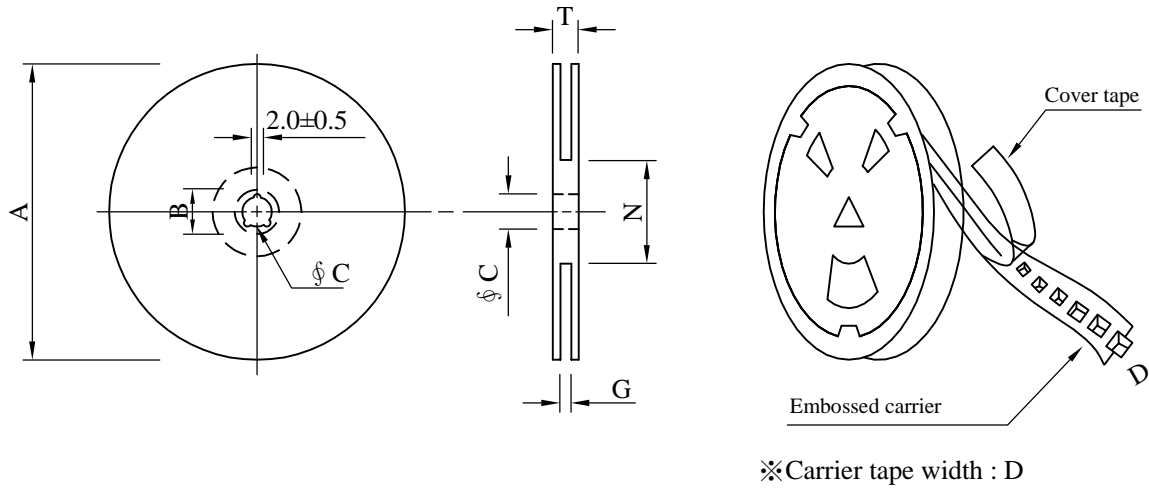
SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	CU1038□□□□L□-□□□		
		REV.	20150526-B	PAGE	4

VI . Packaging information :

(1) Configuration



(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. (g)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
B	800	2,100	13 - 24	3,200	8.3	38 x 37 x 22

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	CU1038□□□□L□-□□□		
		REV.	20150526-B	PAGE	5

VII . 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 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 Second. 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 second. 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 second. 4.IR reflow times : 1 times.	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 time (Every side of sample drop 2 time)	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.

AR-001C