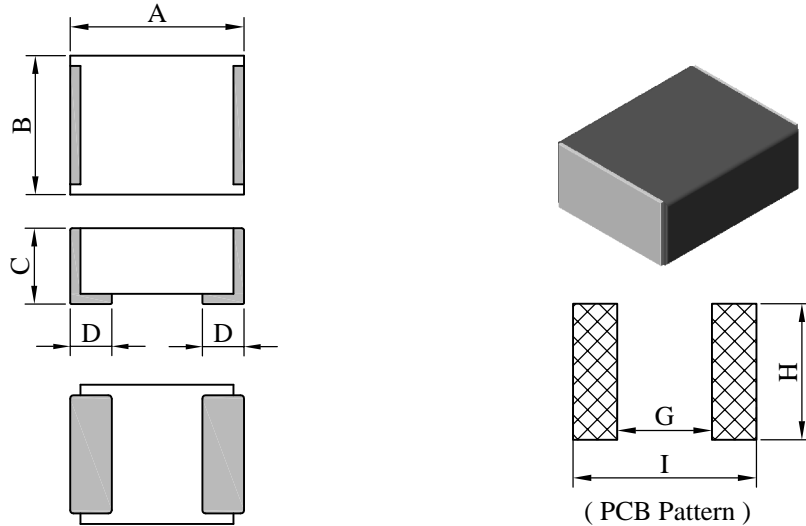


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	DP2510□□□□L□-□□□		
		REV.	20140610-A	PAGE	1

I . Configuration and dimensions :



Unit : m/m

A	B	C	D	G	H	I
2.50 ±0.2	2.00 ±0.2	1.00 max.	0.60 ±0.2	1.20	2.00	2.80

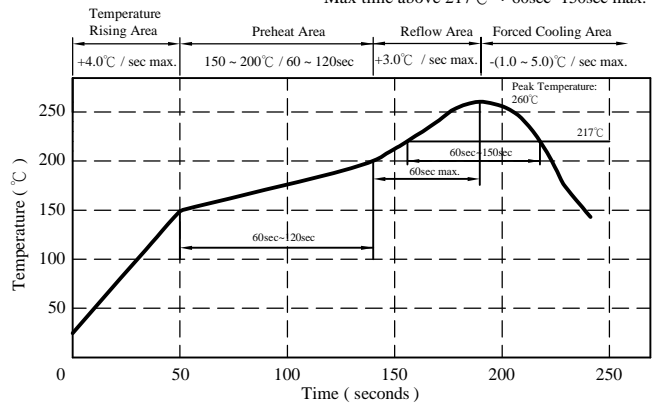
II . Description :

- a . Iron powder
- b . Magnetically shielded.
- c . Enamelled copper wire : H class
- d . Product weight : 30 mg (ref.)
- e . Moisture sensitivity Level 1
- f . Products comply with RoHS' requirements
- g . Halogen free available

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 secs.



AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	DP2510□□□□L□-□□□		
		REV.	20140610-A	PAGE	2

IV . Electrical characteristics :

DWG No.	Inductance (μ H)	RDC (m Ω) max.	Isat (A) max.	Irms (A) max.
DP2510R47ML□-□□□	0.47 \pm 20%	32	4.50	3.51
DP2510R68ML□-□□□	0.68 \pm 20%	44	3.87	2.97
DP25101R0ML□-□□□	1.00 \pm 20%	54	3.15	2.52
DP25101R5ML□-□□□	1.50 \pm 20%	91	2.34	2.25
DP25102R2ML□-□□□	2.20 \pm 20%	117	2.16	2.07

- 1). □: Packaging information : □ Code
- 2). "-□□□" : Reference code
- 3). Electrical specifications at 25°C
- 4). Inductance Test Condition. : 1MHz / 1V
- 5). Isat base on $\Delta L/L0A = 30\%$ max. (Approximately transient current)
- 6). Irms base on Temp. rise 40°C max.

AR-001C

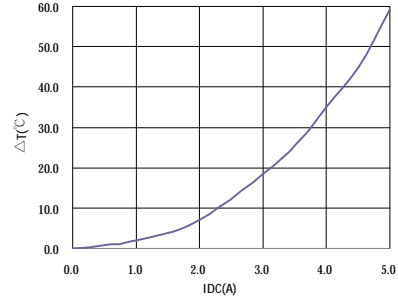
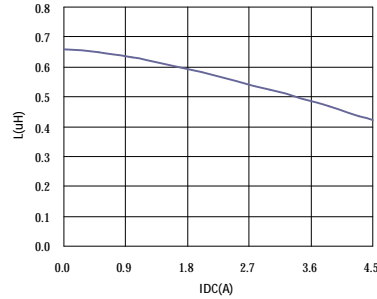
SPECIFICATION FOR APPROVAL

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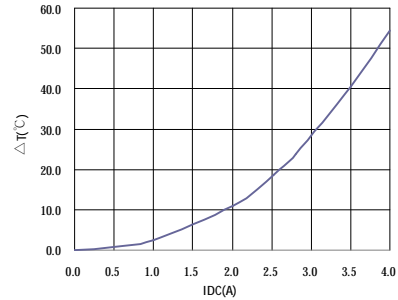
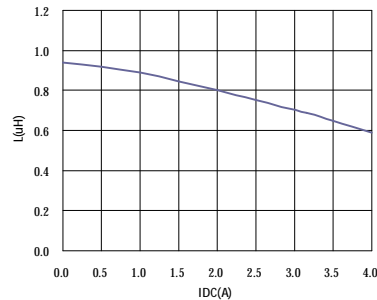
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	DP2510□□□□L□-□□□		
		REV.	20140610-A	PAGE	3

V . Curve :

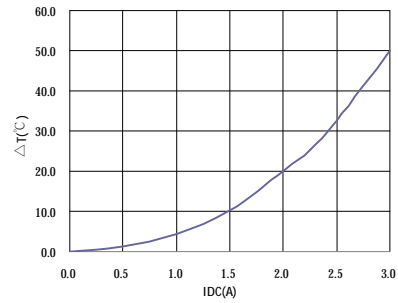
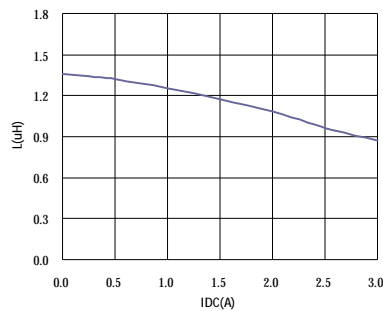
DP2510R68ML□



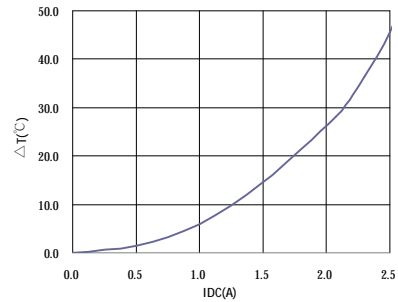
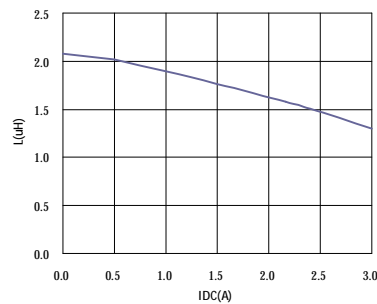
DP25101R0ML□



DP25101R5ML□



DP25102R2ML□



AR-001C

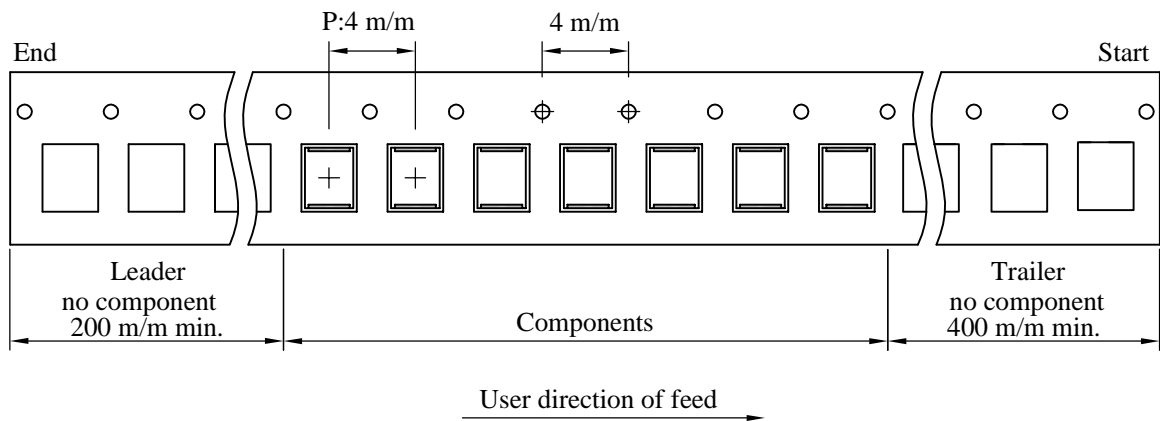
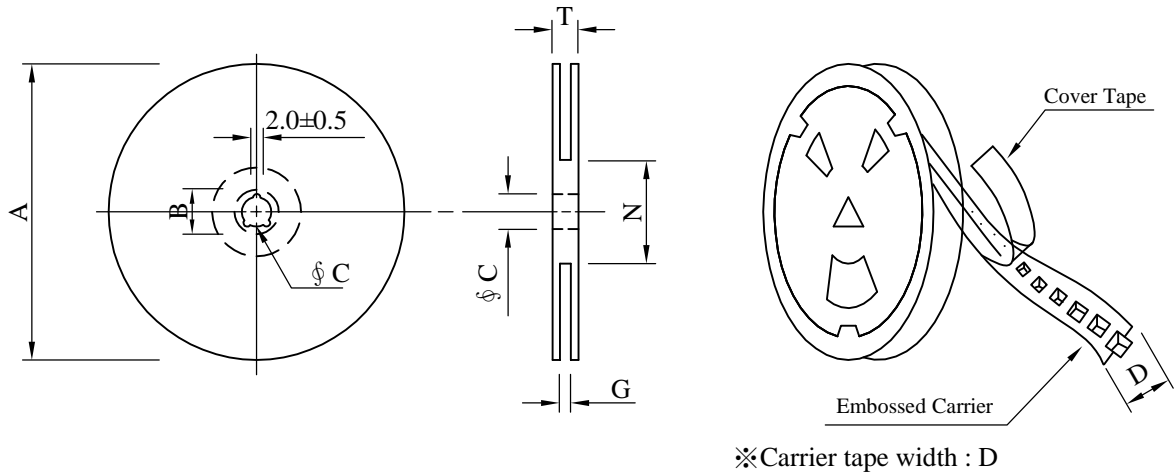
SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	DP2510□□□□L□-□□□		
		REV.	20140610-A	PAGE	4

VI . Packaging information :

(1) Confihuration



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
07 - 08	178	21±0.8	13	8	10 ⁺⁰	50 ⁻⁰	12.5

(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	3,000	180	07 - 08	150,000	7.4	41 x 39 x 22

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	DP2510□□□□L□-□□□		
		REV.	20140610-A	PAGE	5

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 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 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 : 260±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 0.8 kg for 60±1 seconds.	After test, inductors shall be no mechanical damage.

AR-001C