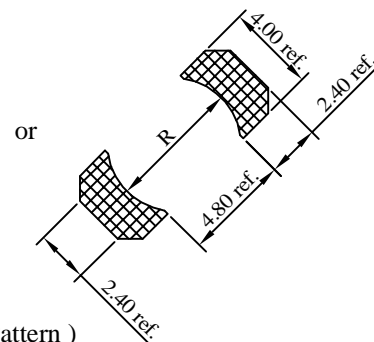
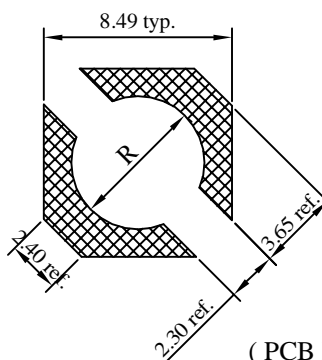
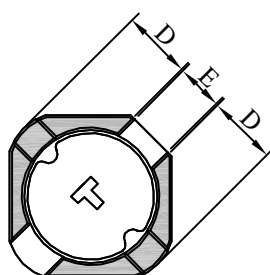
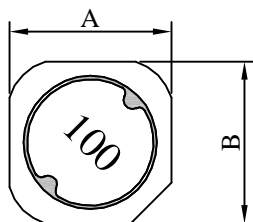


SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SV7028□□□□L□-□□□		
		REV.	20130508-B	PAGE	1

I . Configuration and dimensions :



(PCB Pattern)

Unit : m/m

A	B	C	D	E	R
7.30±0.20	7.30±0.20	2.80±0.20	3.15 typ.	2.10 typ.	6.00 ref.

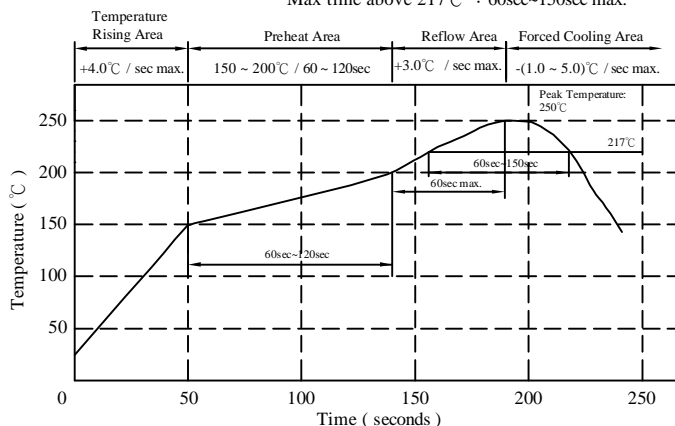
II . Description :

- a . Ferrite drum core construction.
- b . Magnetically shielded.
- c . Enamelled copper wire : H class
- d . Product weight : 0.50 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 : 250°C .10 secs.

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



AR-001C

SPECIFICATION FOR APPROVAL

REF. :

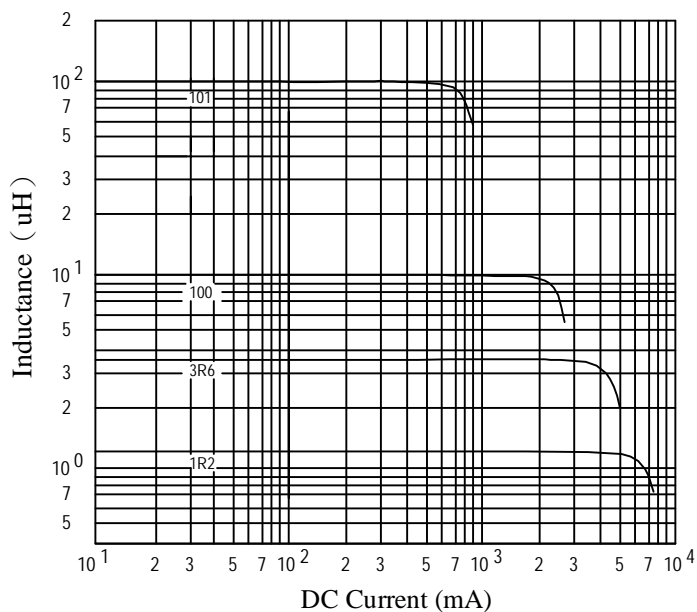
PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SV7028□□□□L□-□□□		
		REV.	20130508-B	PAGE	2

IV . Electrical characteristics :

DWG No.	Inductance (μ H)	Q ref.	Test Freq. (MHz)	SRF (MHz) typ.	RDC ($m\Omega$)		I _{rms} (mA) max.	Isat ₁ (mA) (25°C) typ.	Isat ₂ (mA) (105°C) typ.	Isat ₃ (mA) (125°C) typ.
					typ.	max.				
SV70281R2YL□-□□□	1.20 ± 30 %	10	7.96	80	9.20	12.0	4500	5650	4450	4200
SV70282R0YL□-□□□	2.00 ± 30 %	10	7.96	60	12.0	15.5	4000	4300	3500	3300
SV70282R7YL□-□□□	2.70 ± 30 %	8	7.96	50	14.0	18.0	3700	3900	3150	2700
SV70283R6YL□-□□□	3.60 ± 30 %	8	7.96	40	16.0	21.0	3500	3500	2800	2600
SV70284R6YL□-□□□	4.60 ± 30 %	8	7.96	36	21.0	27.5	3200	3200	2600	2300
SV70286R8YL□-□□□	6.80 ± 30 %	8	7.96	30	27.5	36.0	2800	2800	2350	1900
SV70288R0YL□-□□□	8.00 ± 30 %	8	7.96	26	32.0	42.0	2600	2600	2000	1800
SV7028100YL□-□□□	10.00 ± 30 %	10	2.52	22	40.0	52.0	2500	2300	1850	1650
SV7028150YL□-□□□	15.00 ± 30 %	10	2.52	20	50.0	65.0	2000	2000	1600	1400
SV7028220YL□-□□□	22.00 ± 30 %	8	2.52	16	78.0	100.0	1600	1600	1300	1100
SV7028330YL□-□□□	33.00 ± 30 %	8	2.52	12	115.0	150.0	1200	1300	1050	820
SV7028470YL□-□□□	47.00 ± 30 %	8	2.52	10	165.0	215.0	1000	1000	800	750
SV7028680YL□-□□□	68.00 ± 30 %	8	2.52	8	235.0	310.0	800	900	700	650
SV7028101YL□-□□□	100.00 ± 30 %	8	0.796	6	350.0	455.0	700	800	600	500
SV7028151YL□-□□□	150.00 ± 30 %	10	0.796	5	570.0	740.0	520	600	460	400
SV7028221YL□-□□□	220.00 ± 30 %	8	0.796	4	770.0	1000.0	450	500	400	350
SV7028331YL□-□□□	330.00 ± 30 %	8	0.796	3	1300.0	1700.0	320	400	300	260
SV7028471YL□-□□□	470.00 ± 30 %	8	0.796	2	1700.0	2200.0	300	350	270	230

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

@ Inductance VS. DC Current Curve at 25°C



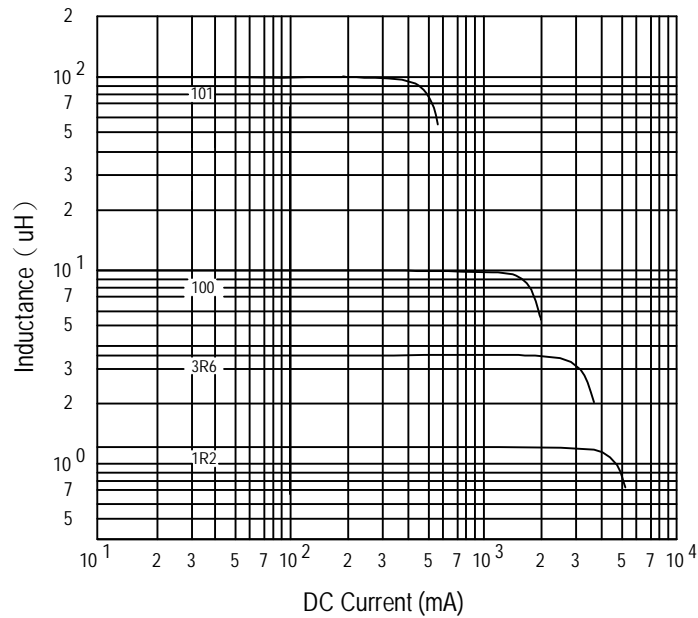
AR-001C

SPECIFICATION FOR APPROVAL

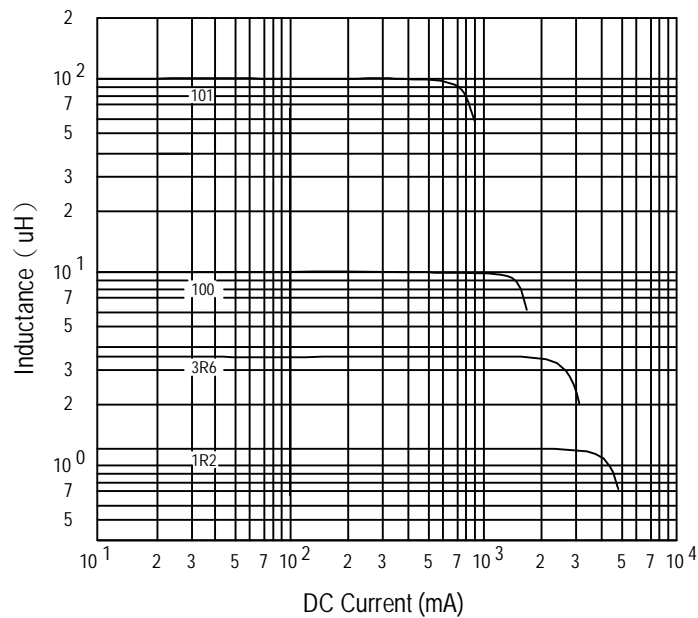
REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SV7028□□□□L□-□□□		
		REV.	20130508-B	PAGE	3

@ Inductance VS. DC Current Curve at 105°C



@ Inductance VS. DC Current Curve at 125°C



AR-001C

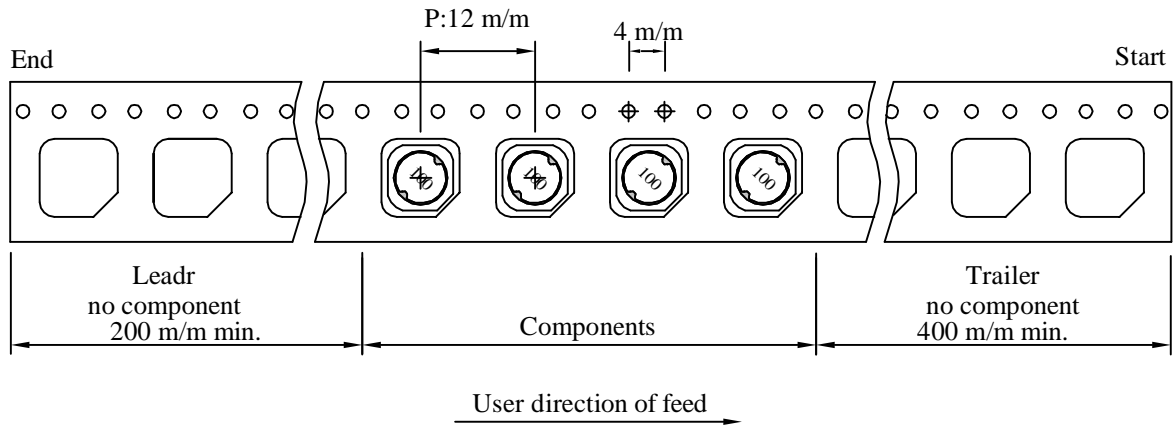
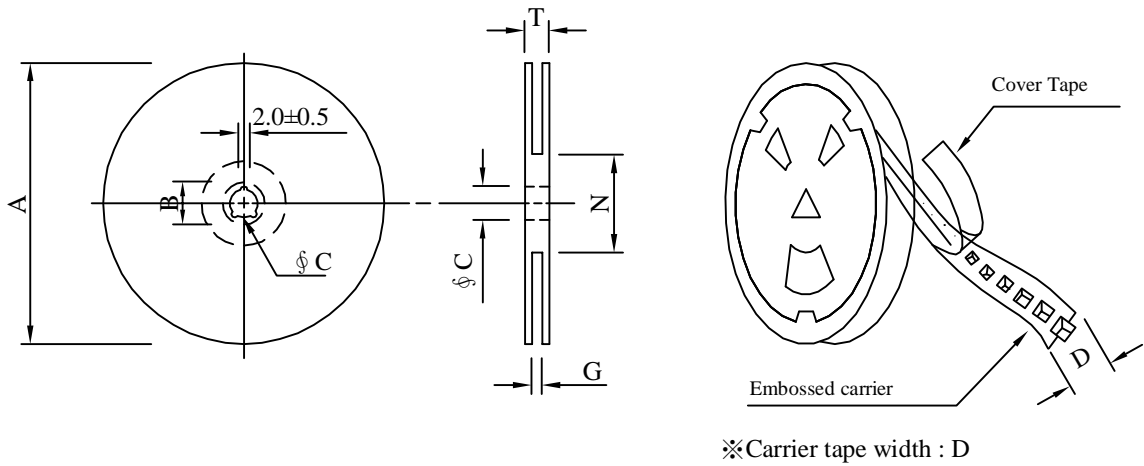
SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.		SV7028□□□□L□-□□□	
		REV.	20130508-B	PAGE	4

V . Packaging information :

(1) Configuration



(2) Dimensions

Unit:m/m

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. (gw)	Style	Q'TY (pcs)	G.W. (Kg)	Size (cm)
B	400	500	07 - 16	12,000	17.5	42 x 41 x 24
C	1,500	1,950	13 - 16	9,000	13.6	38 x 37 x 22

AR-001C

SPECIFICATION FOR APPROVAL

REF. :

PROD. NAME	Shielded SMD Power Inductor	ABC'S DWG NO.	SV7028□□□□L□-□□□		
		REV.	20130508-B	PAGE	5

VI . Reliability test :

Item	Reference documents	Test Condition	Test Specification
1.High Temperature Exposure	MIL-STD-202 Method 108	1.Temperature: 125℃ 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℃ ~ 125℃ 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℃ 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℃ 2.Time:96 hours. 3.Apply rated current.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
5.Exeternal 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 their 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 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 : 250±5℃ 2.Time (temp. ≥ 217℃) : 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 twice 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℃ / 16Hours±30 min. 2.Peak temperature : 240±5℃ 3.Time (temp. ≥ 217℃) : 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℃~125℃ 2.Room temperature : 25℃.	1.No mechanical and electrical damage. 2.Inductance shall not change more than ±20%.
15.Withstanding Voltage Test	MIL-STD-202 Method 201	1.DV: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.

AR-001C

