



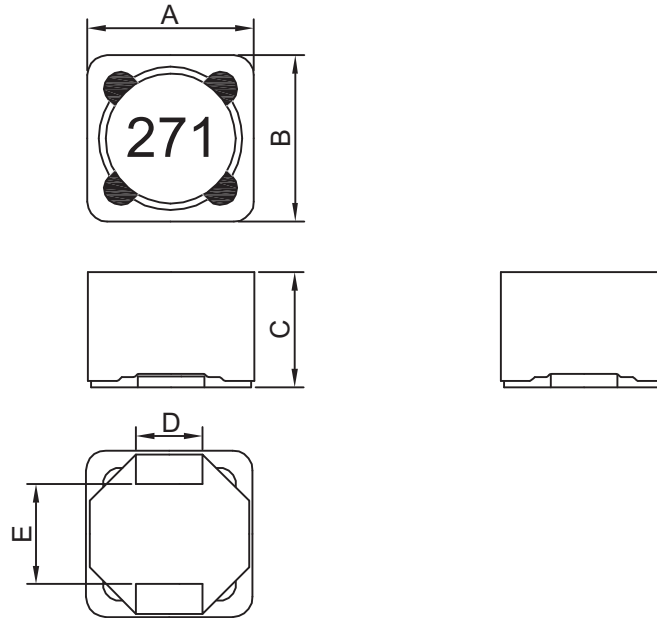
**THE DATASHEET OF
SRR1280-271V4K**



SPECIFICATION FOR APPROVAL

PROD. NAME	Shielded SMD Power Inductor	PART NO:	SRR1280-271V4K
		REF	20120926

I. Configuration and dimensions:



Unit : m/m

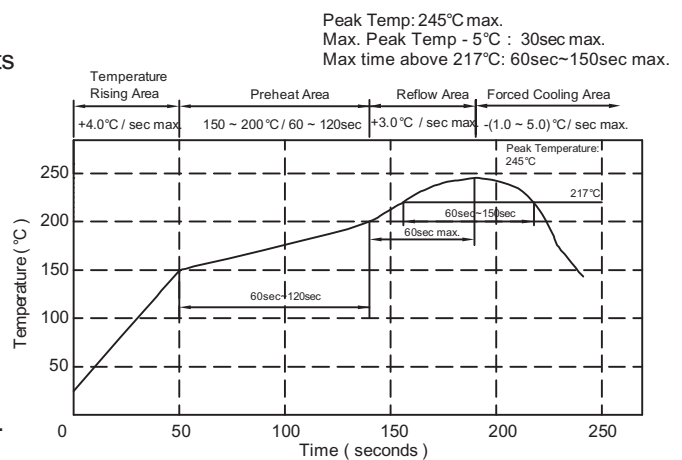
A	B	C	D	E	F	G	H
12.5 0.3	12.5 0.3	7.5 0.5	5.0 0.3	7.0 typ.	6.8 ref.	5.4 ref.	2.9 ref.

II. Description:

- a. Ferrite drum core construction.
- b. Magnetically shielded.
- c. Enamelled copper wire F class
- d. Product weight 4.5 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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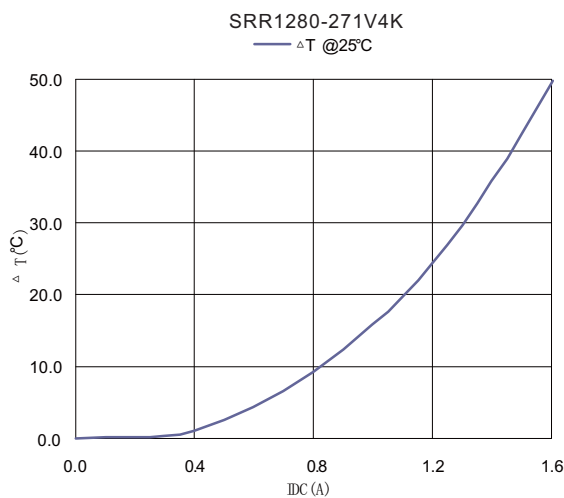
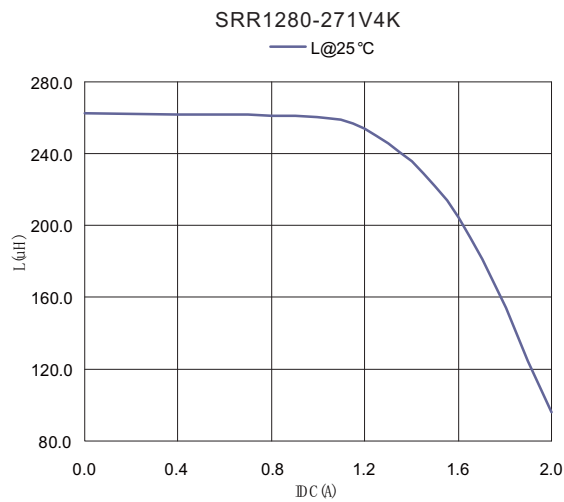
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IV. Electrical characteristics :

PART NO:	Inductance (μ H)	Q ref.	Test Freq. (Hz)		SRF (MHz) typ.	RDC (Ω) max.	Isat (A) typ.	Irms (A) typ.
			L	Q				
SRR1280-271V4K	270.0 10 %	20	1K / 1V	796K	3.1	0.45	1.6	1.2

- 1). Electrical specifications at 25 °C
- 2). Isat base on $\Delta L/L0A=25\%$ typ.
- 3). Irms base on temp. rise 40°C typ.
- 4). Short voltage peaks is 400V max.
(Approximately transient voltage is 400V max.)

V. Curve:

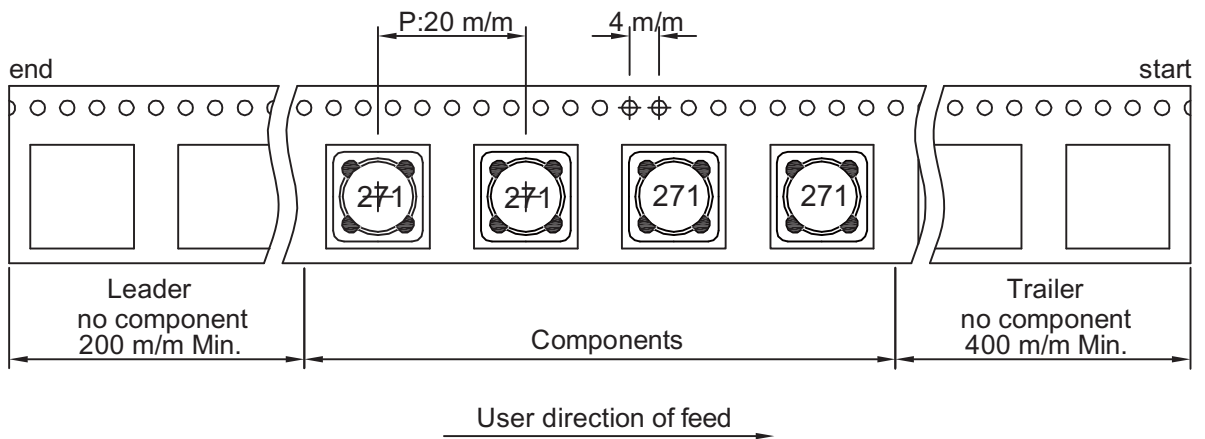
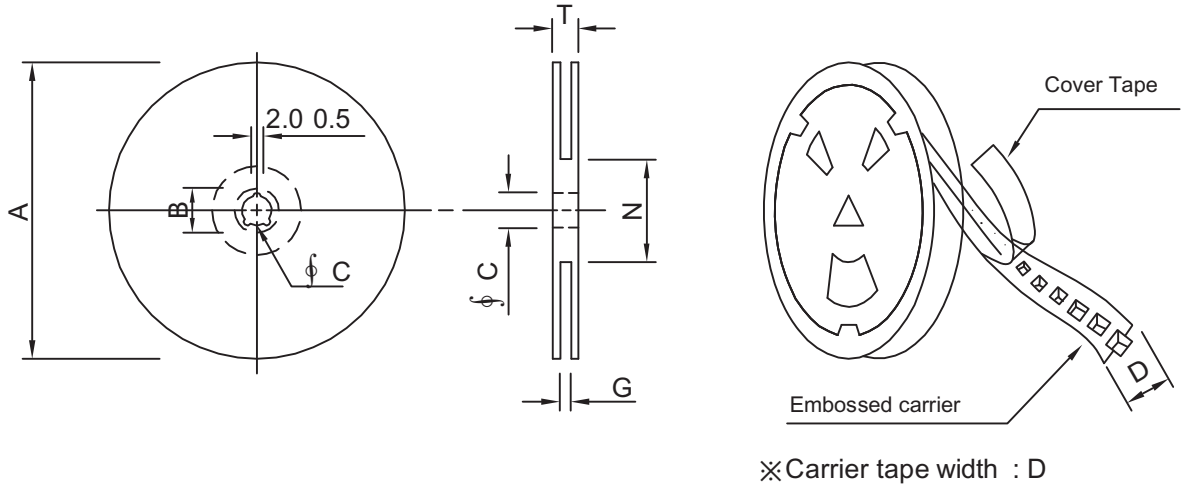


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VI. Packaging information:

(1) Configuration



(2) Dimensions

Unit:m/m

Style	A	B	C	D	G	N	T
13 - 24	330	210.8	13	24	26 ⁺⁰	50 ⁻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	400	2,250	13 - 24	1,600	9.0	38 x 37 x 22

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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.Rated current = 1.6A	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	Verkfy 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 : 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 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°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.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 on mechanical damage.

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