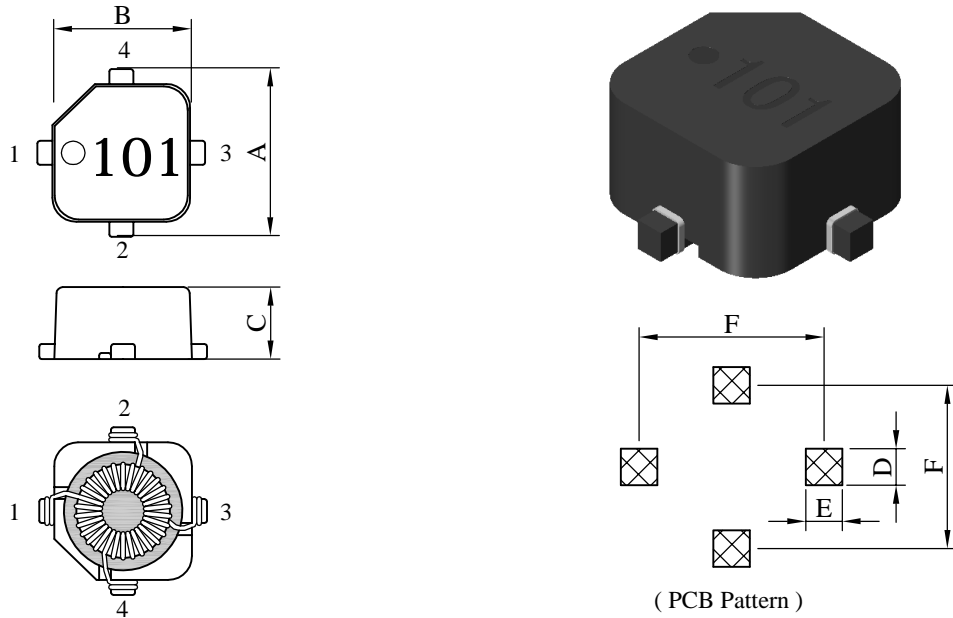


SPECIFICATION FOR APPROVAL

REF. :

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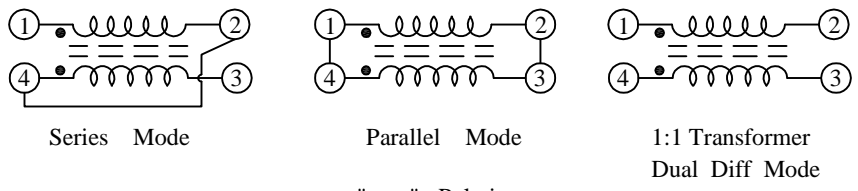
I . Configuration and dimensions :



Unit : m/m

A	B	C	D	E	F
14.00±0.50	11.50±0.50	6.70 max.	4.00 typ.	2.54 typ.	12.70 typ.

II . Schematic diagram :



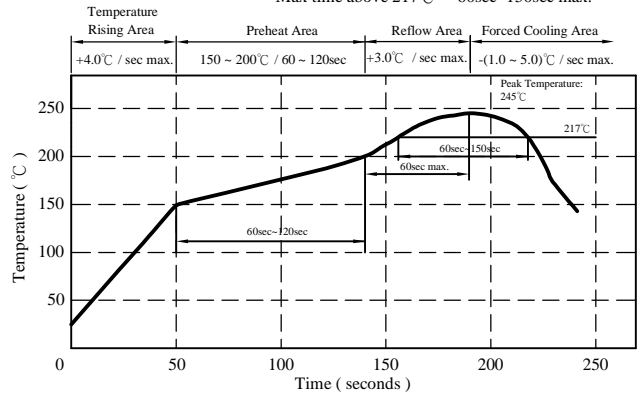
III . Description :

- a . Iron toroidal core construction.
- b . Enamelled copper wire : H class
- c . Product weight : 1.90g (ref.)
- d . Moisture sensitivity Level 1
- e . Products comply with RoHS' requirements
- f . Halogen free available

Peak Temp : 245°C max.
Max. Peak Temp - 5°C : 30sec max.
Max time above 217°C : 60sec~150sec max.

IV . General specification :

- a . Storage temp. : -55°C ~ +125°C
- b . Operating temp. : -55°C ~ +125°C
(Temp. rise included)
- c . Resistance to solder heat : 245°C. 10 secs.



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V . Electrical characteristics :

Dwg. No.	Parallel				Series			
	L (uH) 1K/0.1V	Irms (A)	L (uH) @rated I	RDC (Ω) MAX.	L (uH) 1K/0.1V	Irms (A)	L (uH) @rated I	RDC (Ω) MAX.
SF14075R0ML□-□□□	5 ±20%	3.30	3.8 ±20%	0.019	20 ±20%	1.65	15.2 ±20%	0.076
SF14078R0ML□-□□□	8 ±20%	3.00	5.8 ±20%	0.024	32 ±20%	1.50	23.2 ±20%	0.096
SF1407100ML□-□□□	10 ±20%	2.70	7.3 ±20%	0.028	40 ±20%	1.35	29.2 ±20%	0.110
SF1407150ML□-□□□	15 ±20%	2.20	11.0 ±20%	0.041	60 ±20%	1.10	44.0 ±20%	0.160
SF1407200ML□-□□□	20 ±20%	2.02	14.2 ±20%	0.049	80 ±20%	1.01	56.8 ±20%	0.200
SF1407250ML□-□□□	25 ±20%	1.91	17.0 ±20%	0.054	100 ±20%	0.96	68.0 ±20%	0.220
SF1407330ML□-□□□	33 ±20%	1.60	23.1 ±20%	0.078	132 ±20%	0.80	92.4 ±20%	0.310
SF1407500ML□-□□□	50 ±20%	1.28	35.5 ±20%	0.120	200 ±20%	0.64	142.0 ±20%	0.480
SF1407680ML□-□□□	68 ±20%	1.19	46.2 ±20%	0.140	272 ±20%	0.60	184.8 ±20%	0.560
SF1407101ML□-□□□	100 ±20%	0.98	68.0 ±20%	0.210	400 ±20%	0.49	272.0 ±20%	0.840
SF1407151ML□-□□□	150 ±20%	0.78	103.5 ±20%	0.320	600 ±20%	0.39	414.0 ±20%	1.280
SF1407201ML□-□□□	200 ±20%	0.65	140.0 ±20%	0.470	800 ±20%	0.33	560.0 ±20%	1.880
SF1407251ML□-□□□	250 ±20%	0.60	172.5 ±20%	0.530	1000 ±20%	0.30	690.0 ±20%	2.120
SF1407301ML□-□□□	300 ±20%	0.52	213.0 ±20%	0.730	1200 ±20%	0.26	852.0 ±20%	2.920

- 1). □ : Packaging information : □ Code
- 2). "- □□□ " : Reference code
- 3). Electrical specifications at 25°C
- 4). Irms : Base on temp. rise 35°C max.

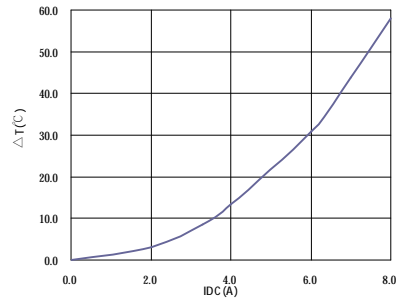
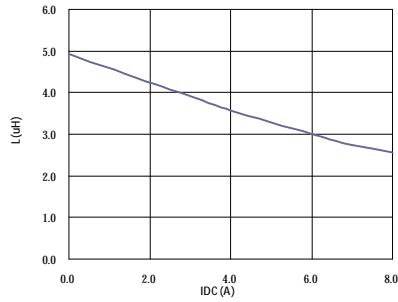
SPECIFICATION FOR APPROVAL

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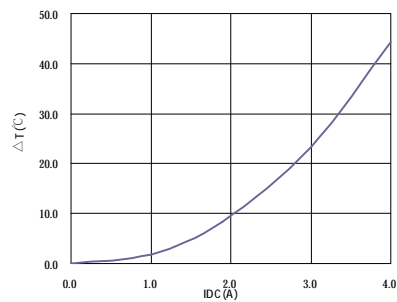
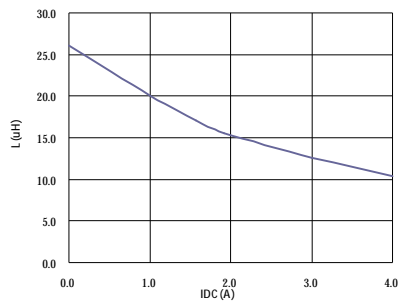
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VI . Curve :

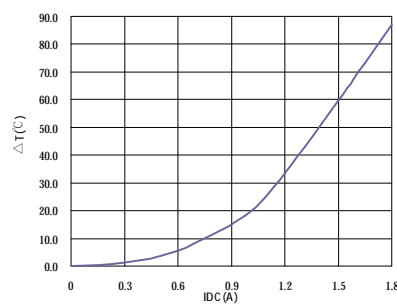
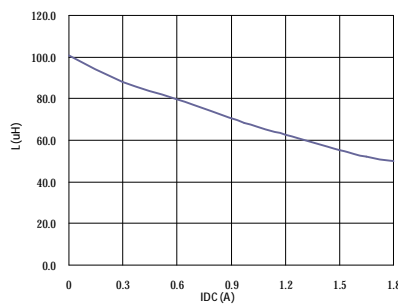
SF14075R0ML□



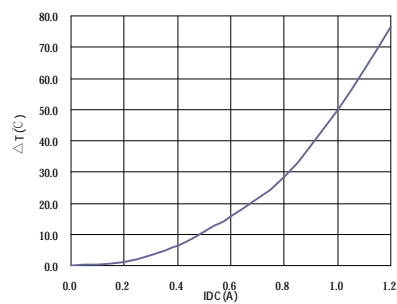
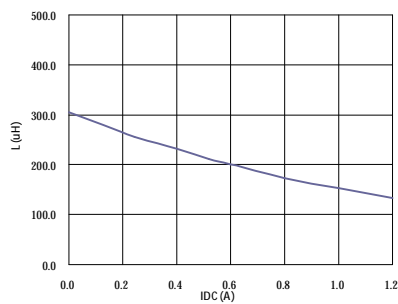
SF1407250ML□



SF1407101ML□



SF1407301ML□



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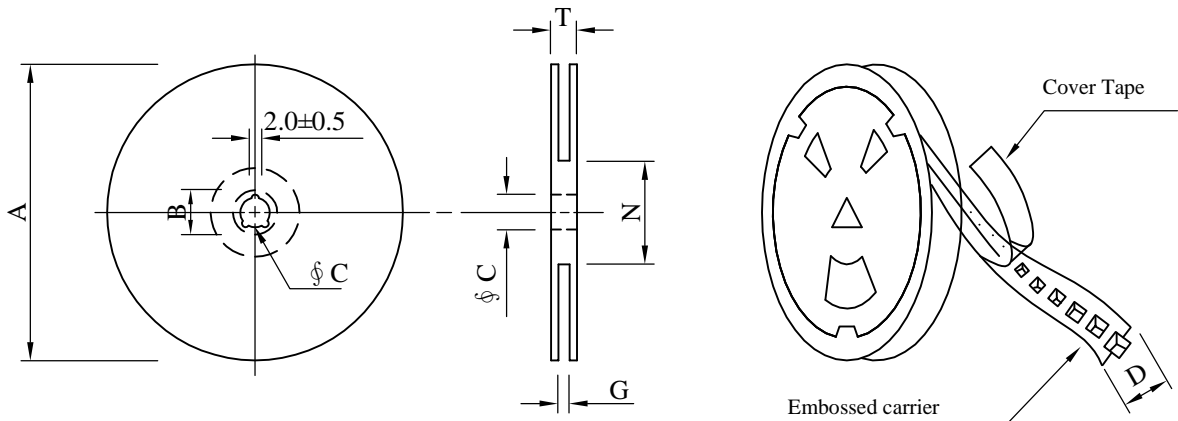
SPECIFICATION FOR APPROVAL

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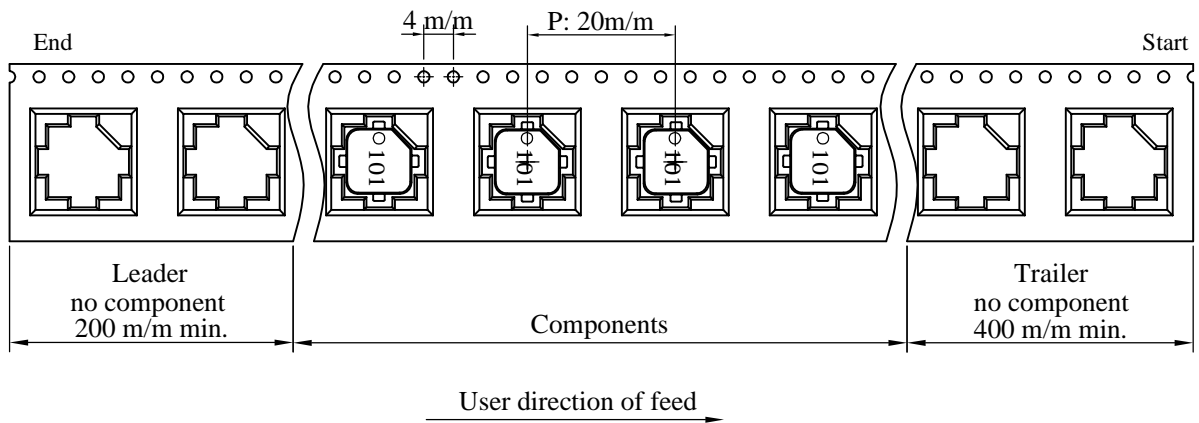
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VII . Packaging information :

(1) Configuration



※Carrier tape width : D



(2) Dimensions : (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	400	780	13 - 24	1600	4.0	38 x 37 x 22

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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°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: -55°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 apperarence. 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 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 : -55°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 1.8 kg for 60±1 seconds.	After test, inductors shall be no mechanical damage.

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