

1. PART NO. EXPRESSION :

S P B 1 2 0 5 1 0 0 Y Z F
(a) (b) (c) (d)(e)(f)

(a) Series code

(b) Dimension code

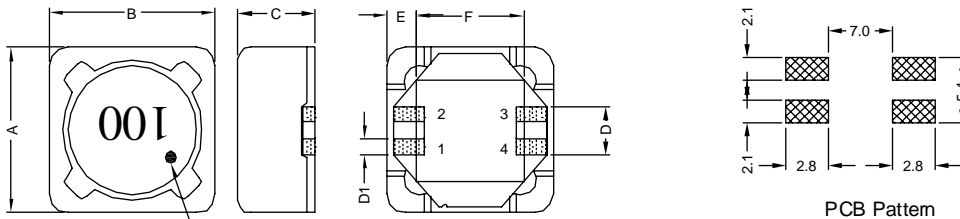
(c) Inductance code : 100 = 10uH

(d) Tolerance code : M = ±20%, Y = ±30%

(e) Z : Standard part

(f) F : RoHS Compliant

2. CONFIGURATION & DIMENSIONS :

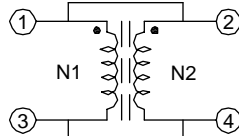
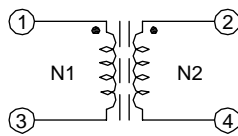


White dot on Pin 1 side

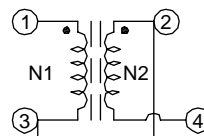
Unit: m/m

A	B	C	D	D1	E	F
12.5±0.3	12.5±0.3	6.00 Max.	5.00 Ref.	1.70 Ref.	2.20 Ref.	7.6 Ref.

3. SCHEMATIC :



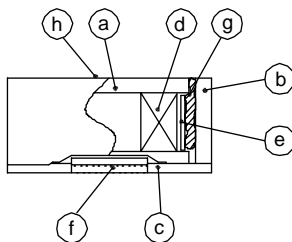
(Parallel)



(Series)

" ● " Polarity

4. MATERIALS :



(a) Core

(b) Core

(c) Base

(d) Wire

(e) Tape

(f) Terminal

(g) Adhesive

(h) Ink



RoHS Compliant

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06.01.2015



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5. GENERAL SPECIFICATION :

- a) $\Delta L/L_{OA}$: 30% Typ. at Isat
- b) Temp. Rise : 40° C Typ. at I_{rms}
- c) Hi-Pot (N1-N2) : 200Vac / 3mA / 1sec
- d) Operating temp. : -40° C to +125° C
- e) Storage condition (component in its packaging)
 - i) Temperature : -10 to 40° C
 - ii) Humidity : 60%
- f) Resistance to solder heat : 260° C.10secs

6. ELECTRICAL CHARACTERISTICS :

Part No.	Inductance (μ H) Ref.	Test Frequency (Hz)	Parallel				Series			
			Inductance (μ H) Ref.	RDC (Ω) Max.	Isat (A)	I _{rms} (A)	Inductance (μ H) Ref.	RDC (Ω) Max.	Isat (A)	I _{rms} (A)
SPB1205R56YZF	0.560	0.25V/100K	0.540	0.0043	25.0	9.50	2.100	0.0160	12.50	5.00
SPB12051R0YZF	1.000	0.25V/100K	0.984	0.0050	19.0	8.50	3.576	0.0200	9.20	4.60
SPB12051R5YZF	1.500	0.25V/100K	1.478	0.0060	12.5	8.20	5.912	0.0245	7.00	4.00
SPB12052R2YZF	2.200	0.25V/100K	2.208	0.0075	12.0	8.00	8.832	0.0290	6.00	3.80
SPB12053R3YZF	3.300	0.25V/100K	3.084	0.0095	10.2	4.80	12.340	0.0380	5.00	3.20
SPB12054R5YZF	4.500	0.25V/100K	4.250	0.0105	9.00	4.60	16.510	0.0410	4.50	2.80
SPB12056R8YZF	6.800	0.25V/100K	6.588	0.0165	7.00	4.30	26.350	0.0640	3.50	2.30
SPB12058R2YZF	8.200	0.25V/100K	8.048	0.0180	6.50	4.00	32.190	0.0700	3.10	2.00
SPB1205100YZF	10.000	0.25V/100K	9.654	0.0224	5.70	3.70	38.620	0.0895	2.80	1.80
SPB1205150YZF	15.000	0.25V/100K	15.350	0.0298	4.70	3.30	61.400	0.1190	2.30	1.65
SPB1205220YZF	22.000	0.25V/100K	22.360	0.0420	3.65	3.00	89.440	0.1720	1.80	1.52
SPB1205330YZF	33.000	0.25V/100K	33.740	0.0600	3.10	2.70	135.000	0.2460	1.55	1.30
SPB1205470YZF	47.000	0.25V/100K	47.470	0.0810	2.60	2.20	189.900	0.3250	1.35	1.10
SPB1205680YZF	68.000	0.25V/100K	67.910	0.1180	2.20	1.80	271.000	0.4600	1.10	0.80
SPB1205820YZF	82.000	0.25V/100K	86.890	0.1400	2.00	1.60	347.600	0.5580	1.00	0.75
SPB1205101MZF	100.000	0.25V/100K	102.700	0.1830	1.75	1.40	410.800	0.7280	0.90	0.50
SPB1205151MZF	150.000	0.25V/100K	151.100	0.2640	1.50	1.10	604.400	1.0500	0.75	0.45
SPB1205221MZF	220.000	0.25V/100K	216.800	0.3760	1.20	0.90	867.200	1.4900	0.60	0.38
SPB1205331MZF	330.000	0.25V/100K	332.600	0.5600	1.00	0.70	1330.000	2.2400	0.48	0.35
SPB1205471MZF	470.000	0.25V/100K	473.100	0.7740	0.82	0.55	1892.000	3.1000	0.38	0.30
SPB1205681MZF	680.000	0.25V/100K	679.800	1.1450	0.71	0.45	2719.000	4.5800	0.33	0.27
SPB1205821MZF	820.000	0.25V/100K	828.000	1.4590	0.63	0.38	3312.000	5.8400	0.31	0.20
SPB1205102MZF	1000.00	0.25V/100K	975.200	1.6600	0.60	0.28	4032.000	6.6600	0.29	0.18

Tolerance code : M = $\pm 20\%$
 Y = $\pm 30\%$



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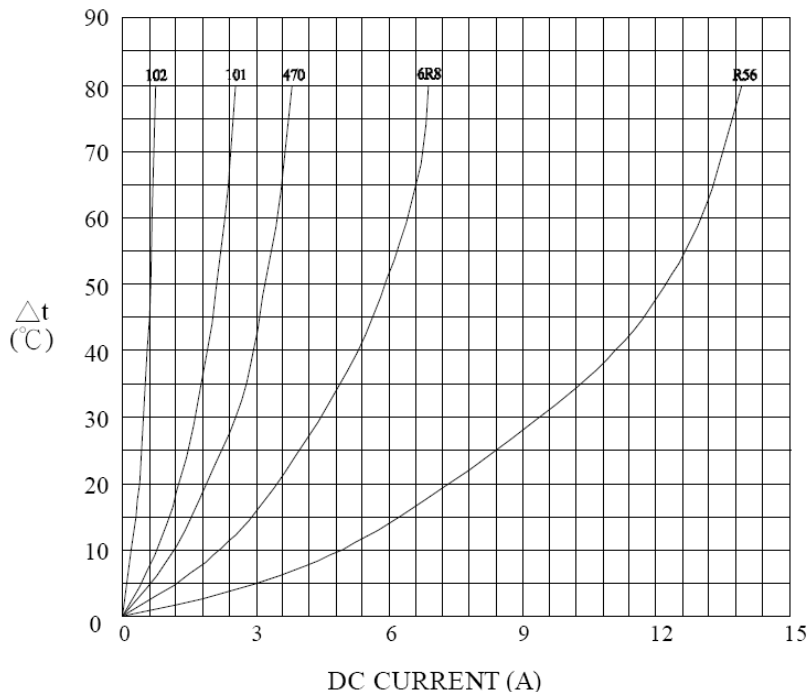
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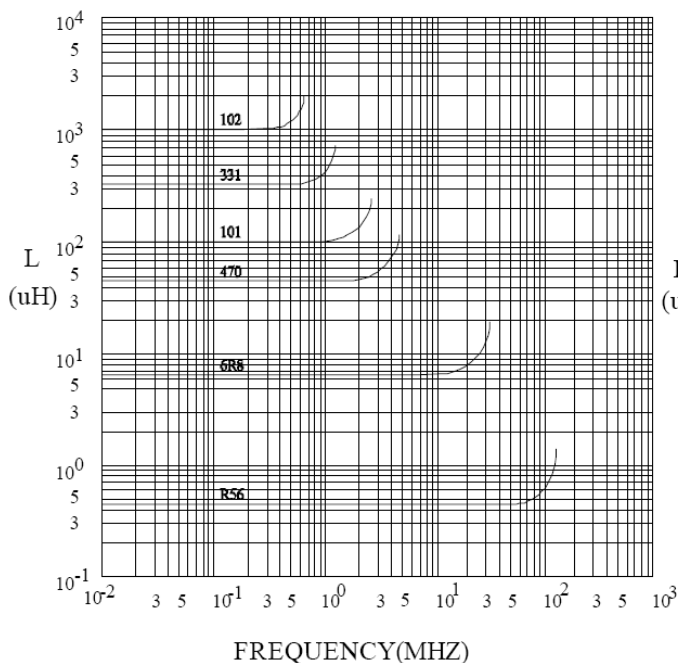
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7. CHARACTERISTICS CURVES : (PARALLEL)

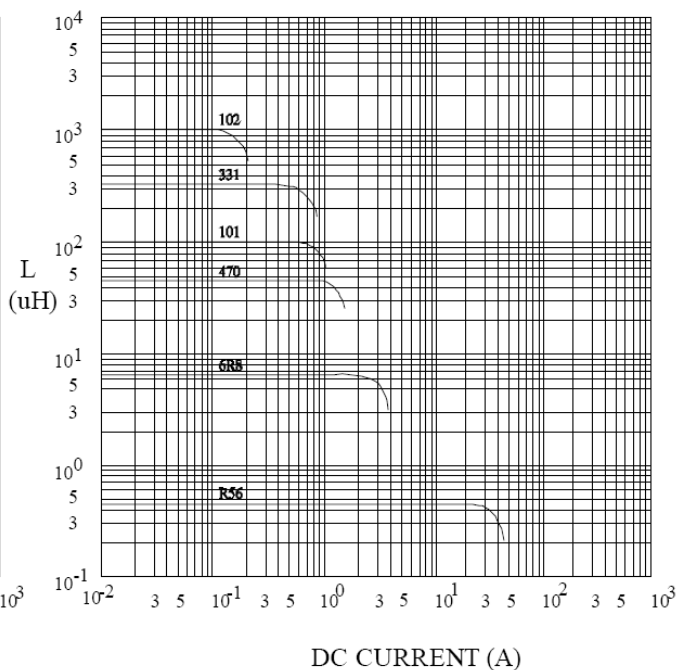
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



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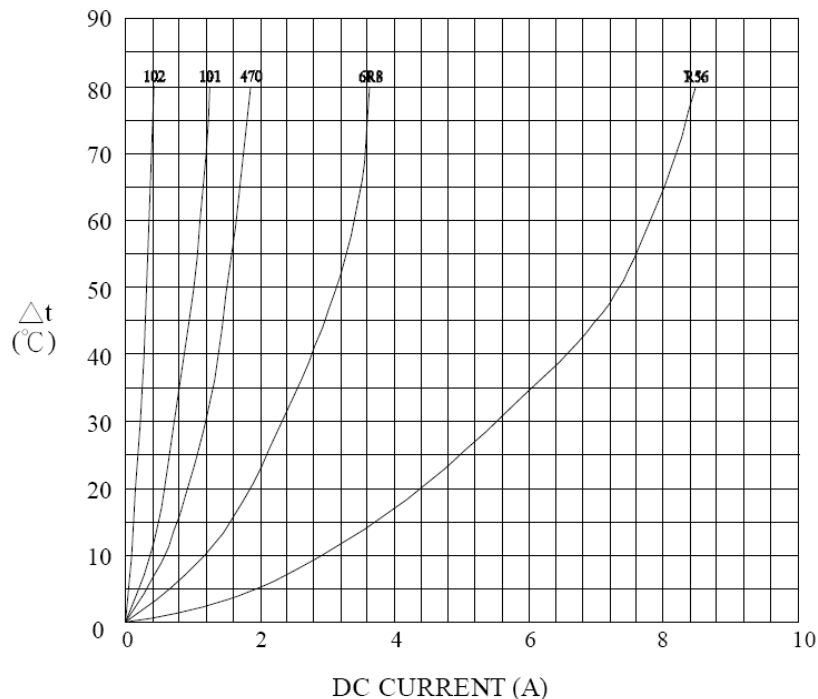
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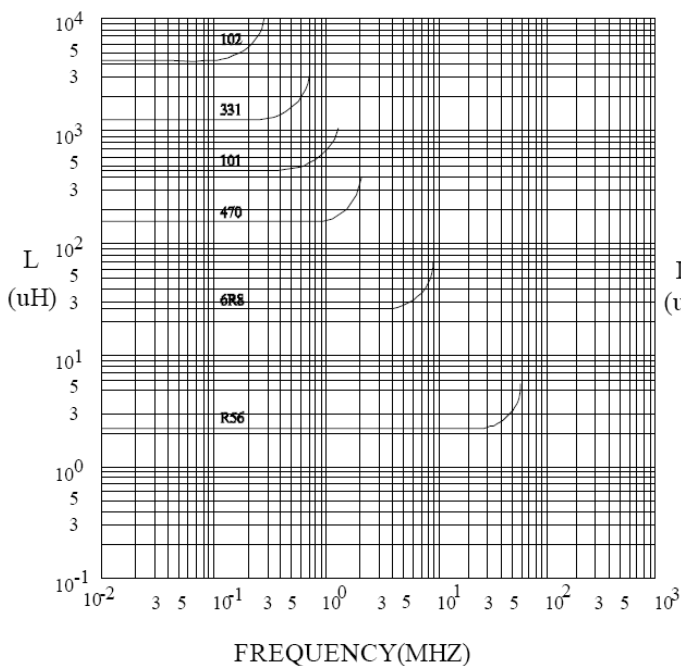


7. CHARACTERISTICS CURVES : (SERIES)

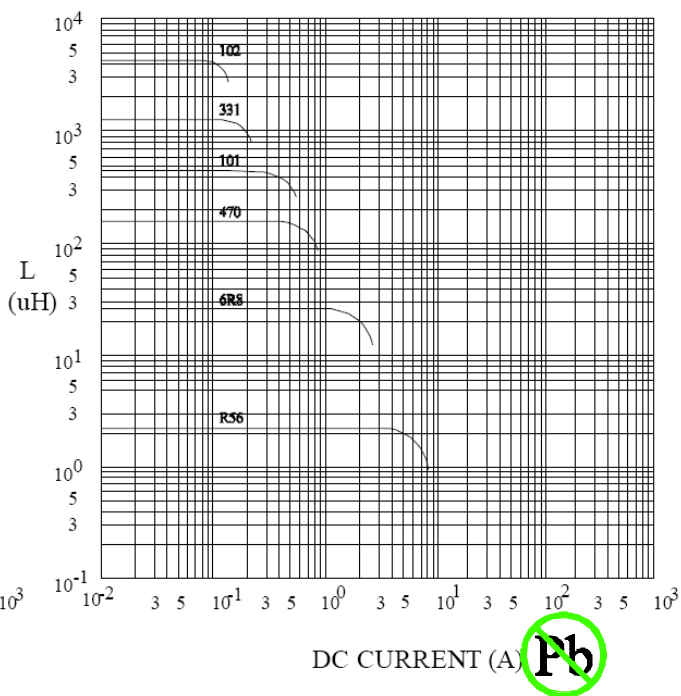
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE

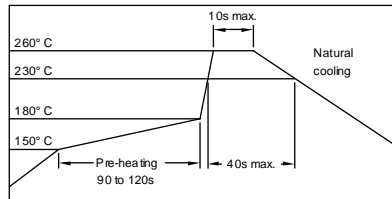


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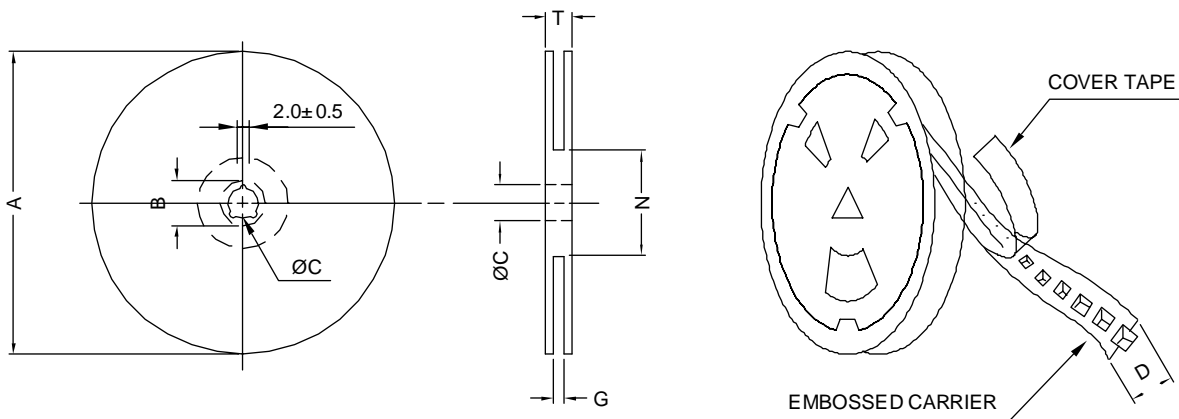


RECOMMENDED SOLDERING CONDITIONS REFLOW SOLDERINGS

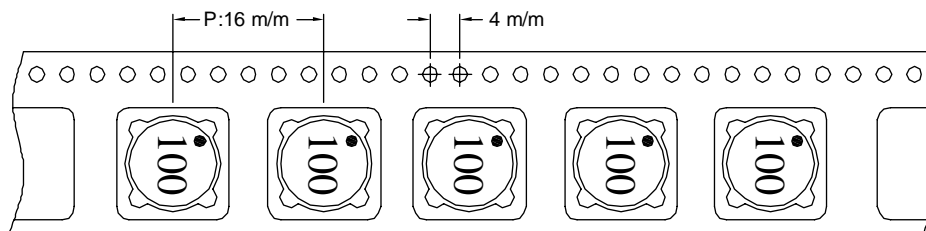


8. PACKAGING INFORMATION :

(1) CONFIGURATION



* CARRIER TAPE WIDTH : D



(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	50 ⁻⁰	30.4

(3) QTY & G.W. PER PACKAGE

SERIES	INNER : REEL			OUTER : CARTON		
	QTY (PCS)	G.W. (gw)	STYLE	QTY (PCS)	G.W. (Kg)	SIZE (cm)
SPB1205	600	1900	13-24	2400	11.1	38 x 36.5 x 21



RoHS Compliant

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