

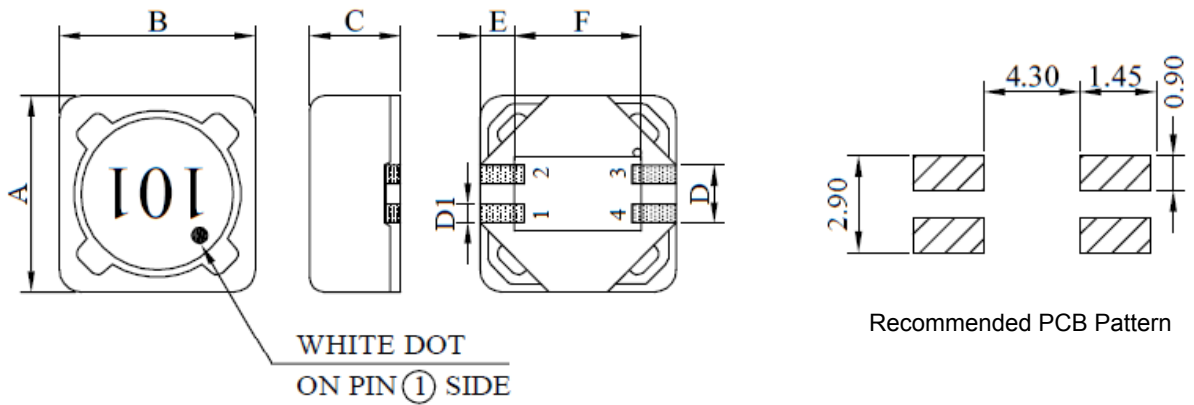
1. Part No. Expression:

S P B 0 7 0 4 1 0 0 M Z F

(a) (b) (c) (d) (e)(f)

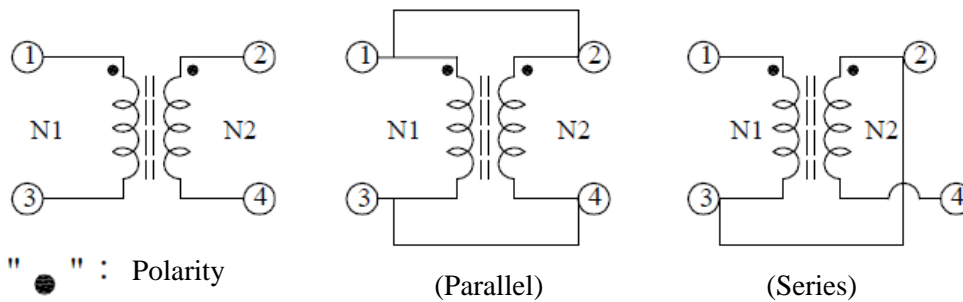
- (a) Series Code
- (b) Dimension Code
- (c) Inductance Code
- (d) Tolerance Code
- (e) Standard Part
- (f) RoHS Compliant

2. Configuration & Dimensions : (Unit: mm)

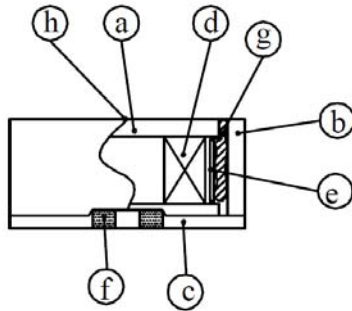


A	B	C	D	D1	E	F
7.30±0.20	7.30±0.20	4.45 Max.	2.70 Ref.	0.70 Ref.	1.25 Ref.	4.50 Ref.

3. Schematic



4. Material List



- a) Core
- b) Core
- c) Base
- d) Wire
- e) Tape
- f) Terminal
- g) Adhesive
- h) Ink

5. General Specification

- a) $\Delta L/LoA$: 30% Typ. at Isat
- b) Temp. Rise: 40°C Typ. at Irms
- c) Hi-Pot (1-2): 200Vac /3mA /1Sec
- d) Operating Temperature: - 40°C to +125°C
- e) Storage Temperature: - 40°C to +125°C
- f) Resistance to Solder Heat: 260°C, 10Sec.

6. Electrical Characteristics

Part No.	Inductance (uH) Ref.	Test Frequency (Hz)	Parallel				Series			
			Inductance (uH) Ref.	RDC (Ω) Max.	Isat (A)	Irms (A)	Inductance (uH) Ref.	RDC (Ω) Max.	Isat (A)	Irms (A)
SPB0704R80YZF	0.80	0.25V/100K	0.752	0.0132	10.20	5.33	3.008	0.0528	5.10	2.660
SPB07041R5YZF	1.50	0.25V/100K	1.422	0.0188	7.00	4.96	5.688	0.0752	3.80	2.480
SPB07042R2YZF	2.20	0.25V/100K	1.986	0.0204	6.60	4.66	7.944	0.0816	3.38	2.330
SPB07043R3YZF	3.30	0.25V/100K	3.396	0.0258	5.20	3.94	13.580	0.1032	2.50	1.970
SPB07044R7YZF	4.70	0.25V/100K	5.182	0.0354	4.37	3.34	20.730	0.1416	2.15	1.670
SPB07046R8YZF	6.80	0.25V/100K	7.344	0.0492	3.50	2.60	29.380	0.1968	1.75	1.300
SPB07048R2YZF	8.20	0.25V/100K	8.566	0.0564	3.20	2.53	34.260	0.2256	1.58	1.270
SPB0704100MZF	10.0	0.25V/100K	9.882	0.0606	3.05	2.41	39.530	0.2424	1.50	1.200
SPB0704150MZF	15.0	0.25V/100K	16.090	0.0948	2.40	2.00	64.360	0.3792	1.20	1.000
SPB0704220MZF	22.0	0.25V/100K	21.730	0.1272	1.95	1.75	86.920	0.5088	1.02	0.874

SMD Power Inductor – SPB0704 Series

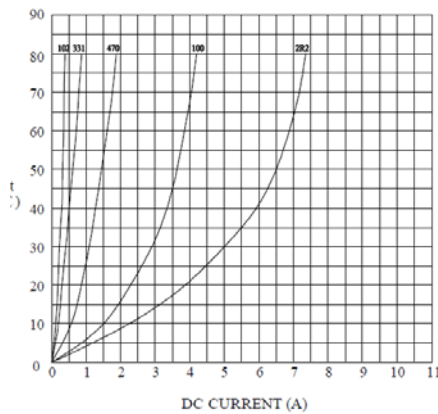
SPB0704330MZF	33.0	0.25V/100K	33.010	0.2052	1.60	1.30	132.000	0.8208	0.81	0.650
SPB0704470MZF	47.0	0.25V/100K	49.640	0.2940	1.32	1.05	198.600	1.1760	0.67	0.525
SPB0704680MZF	68.0	0.25V/100K	69.670	0.4056	1.18	0.95	278.700	1.6224	0.59	0.475
SPB0704820MZF	82.0	0.25V/100K	80.950	0.4920	1.09	0.83	323.800	1.9680	0.55	0.415
SPB0704101MZF	100.0	0.25V/100K	101.600	0.5736	0.96	0.75	406.400	2.2944	0.48	0.375
SPB0704151MZF	150.0	0.25V/100K	150.000	0.8352	0.78	0.60	600.000	3.3408	0.39	0.300
SPB0704221MZF	220.0	0.25V/100K	227.000	1.2192	0.65	0.50	908.000	4.8768	0.32	0.250
SPB0704331MZF	330.0	0.25V/100K	335.600	2.1720	0.53	0.40	1342.000	8.688	0.25	0.200
SPB0704471MZF	470.0	0.25V/100K	465.300	2.6520	0.46	0.35	1861.000	10.608	0.22	0.175
SPB0704681MZF	680.0	0.25V/100K	671.200	4.2480	0.37	0.28	2685.000	16.992	0.175	0.140
SPB0704821MZF	820.0	0.25V/100K	812.700	4.6680	0.35	0.26	3251.000	18.672	0.17	0.130
SPB0704102MZF	1000.0	0.25V/100K	1009.000	5.1840	0.31	0.24	4036.000	20.736	0.16	0.120

Tolerance Code: Y ±30%, M ±20%

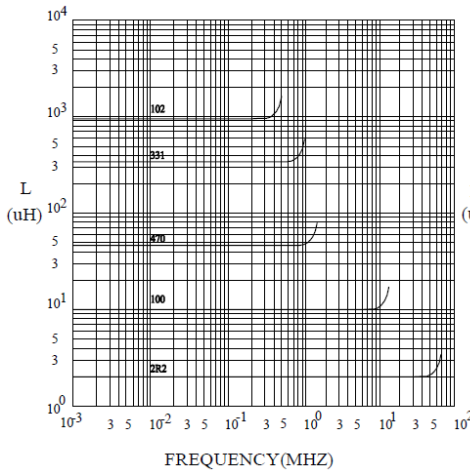
7. Characteristics Curves

a) Parallel

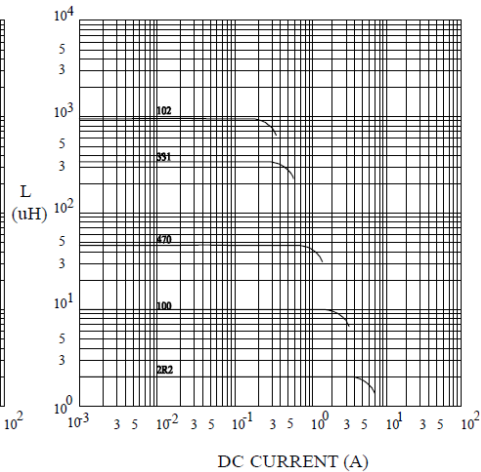
@ TEMP. RISE VS. DC SUPERPOSITION RESPONSE CURVE



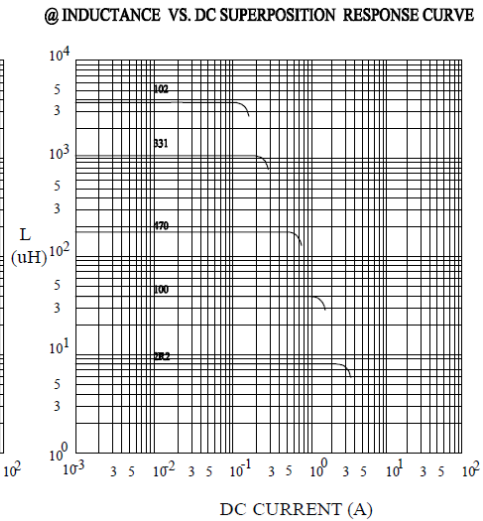
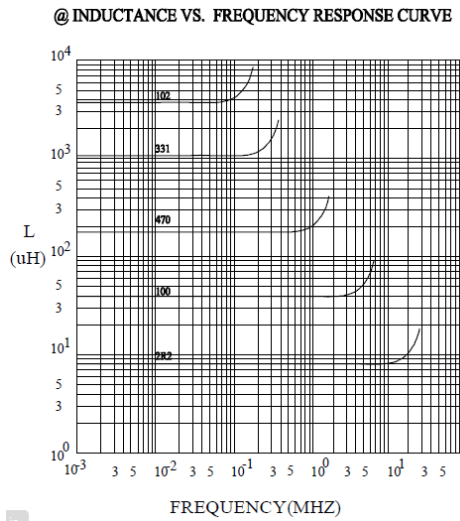
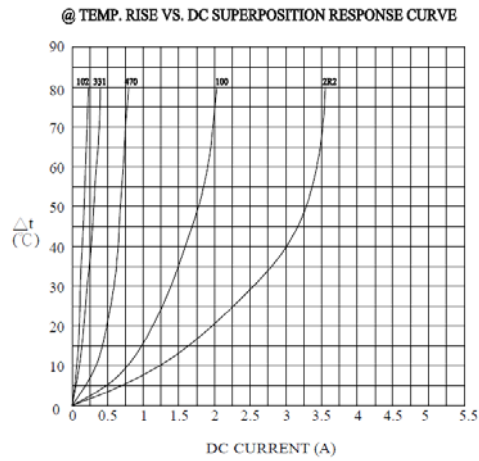
@ INDUCTANCE VS. FREQUENCY RESPONSE CURVE



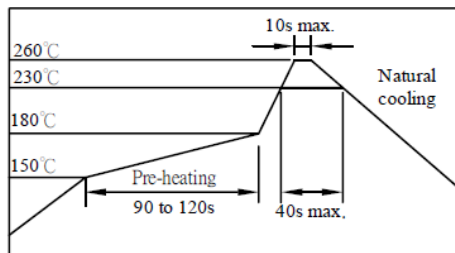
@ INDUCTANCE VS. DC SUPERPOSITION RESPONSE CURVE



b) Series

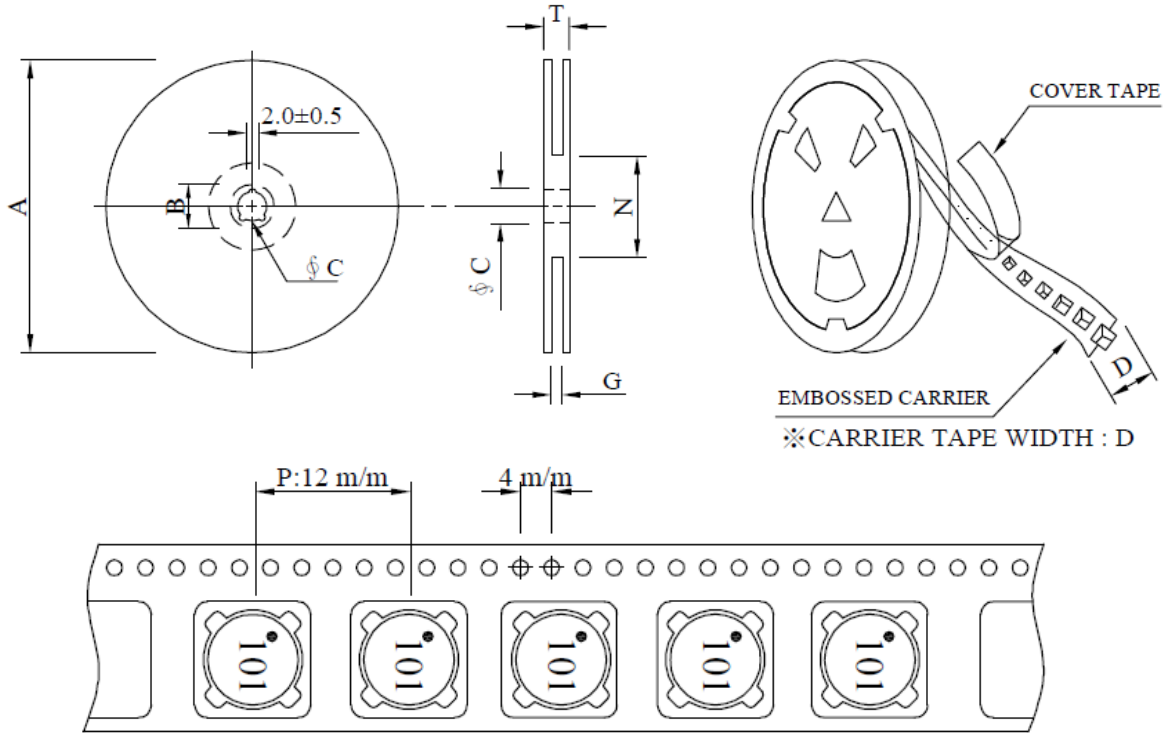


RECOMMENDED SOLDERING CONDITIONS
REFLOW SOLDERINGS



8. Packaging Information

8-1. Configuration



8-2. Dimensions

Style	A	B	C	D	G	N	T
13-16	330	21±0.8	13	16	18 Max.	50 Min.	22.4

8-3. Quantity & G.W. Per Package

Series	Inner: Reel			Outer: Carton		
	Qty (pcs)	G.W (gw)	Style	Qty (pcs)	G.W (kg)	Size (cm)
SPB0704	1000	717	13-16	6000	7.9	38 x 36.5 x21