

TPRB □□□□ TYPE

● FEATURE

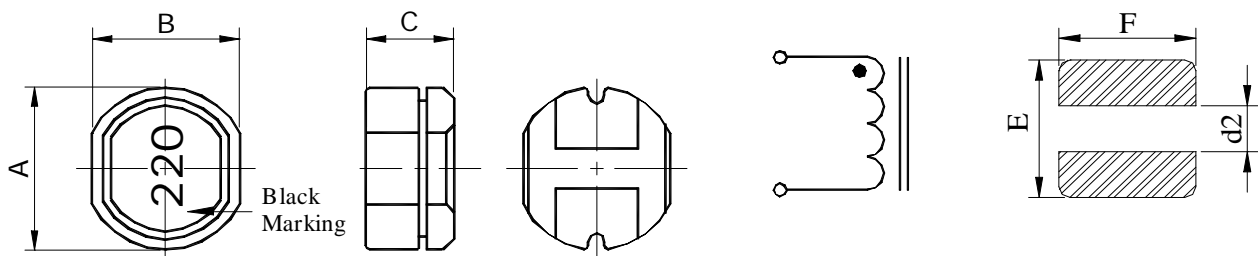
1. High current capacity and Low DCR
2. High heat resistance, ideal for reflow soldering
3. High reliability

● Applications

1. Portable telephone, Personal Computer
2. Hard Disk drives, and other electronic equipment

● Shape and Dimension

● Schematics and Land Patterns(mm)



● Specification

Dimension in m/m

TYPE	A	B	C	E	d2	F
TPRB0603	6.20±0.30	5.60±0.30	3.20±0.30	6.00	1.70	5.50
TPRB0704	7.50±0.35	7.00±0.35	4.50±0.40	8.00	2.00	7.50
TPRB1005	10.0±0.40	9.00±0.40	5.00±0.50	10.00	2.50	9.50
TPRB1205	12.6±0.50	11.6±0.50	5.40±0.50	15.00	3.00	12.00

Note1. Measurement frequency of Inductance value : at 100KHz, 0.25V

Note2. Measurement ambient temperature of L, DCR and IDC : at 25°C

Note3. IDC : This indicates the value of current when the inductances is 10% lower than its initial value at D.C. superimposition or D.C. current when at $\Delta t=40^{\circ}\text{C}$, which is lower. ($T_a=20^{\circ}\text{C}$)

Note4. Inductance tolerance: M: ±20%

Note5. Ordering Code: TYPE NAME: TPRB0603

Main Inductance: 100 (10uH)

Tolerance : M (±20%)

Note6. This specification might be changed without notice due to under developing and improving.

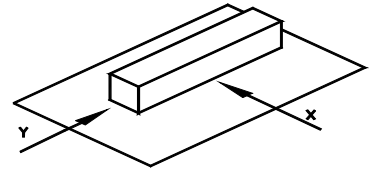
Thank you for your understanding.

Part No.	Inductance(uH)	D.C.R.(ΩMax)/Rated D.C. Current(A)			
		TPRB0603	TPRB0704	TPRB1005	TPRB1205
0R8	0.8				
1R5	1.5				
2R2	2.2				
2R5	2.5				
3R3	3.3				
3R8	3.8				
4R7	4.7				
5R2	5.2				
6R8	6.8				
8R2	8.2				
100	10	0.14 / 1.00	0.07 / 1.65	0.06 / 2.06	0.05 / 2.65
120	12	0.16 / 0.94	0.07 / 1.57	0.07 / 1.94	0.05 / 2.50
150	15	0.18 / 0.86	0.08 / 1.39	0.07 / 1.72	0.06 / 2.45
180	18	0.25 / 0.78	0.10 / 1.29	0.08 / 1.58	0.06 / 2.40
220	22	0.32 / 0.76	0.12 / 1.12	0.08 / 1.42	0.07 / 2.20
270	27	0.36 / 0.64	0.16 / 1.06	0.10 / 1.32	0.08 / 2.00
330	33	0.41 / 0.61	0.18 / 0.97	0.11 / 1.16	0.10 / 1.80
390	39	0.47 / 0.53	0.18 / 0.91	0.12 / 1.10	0.11 / 1.65
470	47	0.51 / 0.50	0.27 / 0.80	0.14 / 1.00	0.12 / 1.50
560	56	0.72 / 0.46	0.29 / 0.76	0.19 / 0.93	0.15 / 1.38
680	68	0.82 / 0.42	0.33 / 0.68	0.21 / 0.85	0.17 / 1.26
820	82		0.43 / 0.62	0.28 / 0.79	0.20 / 1.14
101	100		0.49 / 0.55	0.34 / 0.72	0.25 / 1.05
121	120		0.68 / 0.49	0.37 / 0.63	0.28 / 0.95
151	150		0.94 / 0.44	0.51 / 0.55	0.40 / 0.85
181	180		1.00 / 0.40	0.57 / 0.50	0.48 / 0.77
221	220		1.18 / 0.36	0.78 / 0.47	0.52 / 0.70
271	270		1.30 / 0.33	0.87 / 0.41	0.70 / 0.63
331	330			1.20 / 0.37	0.80 / 0.57
391	390			1.34 / 0.35	1.08 / 0.52
471	470			1.50 / 0.33	1.20 / 0.48
561	560				1.34 / 0.44
681	680				1.78 / 0.40
821	820				2.00 / 0.36

GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 85°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Ywithstanding at below conditions.

Terminal should not peel off. (refer to figure at right) 5. 0N 60 sec.



4. Insulating resistance: Over 100MΩ at 100V D.C. between coil and core.
5. Dielectric strength: No dielectric breakdown at 100V D.C. for 1 minute between coil and core.
6. Temperature characteristics: Inductance coefficient $(0\sim 2,000)\times 10^{-6}/^{\circ}\text{C}$ (-25~+80°C).
7. Humidity characteristics(Moisture Resistance): Inductance deviation within $\pm 5\%$, after 96 hours in 90~95% relative humidity at $40 \pm 2^{\circ}\text{C}$ and 1 hour drying under normal condition.
8. Vibration resistance: Inductance deviation within $\pm 5\%$, after vibration for 1 hour. In each of three orientations at sweep vibration (10~55~10 Hz) with 1.5mm P-P amplitudes.
9. Shock resistance: Inductance deviation within $\pm 5\%$, after being dropped once with 981m/s² (100G) shock attitude upon a rubber block method shock testing machine, in three different orientations.
10. Resistance to Soldering Heat: 260°C, 10 seconds(See attached recommend reflow)
11. Storage environment: Storage condition: Temperature Range: 10°C ~ 35°C (Generally: 21°C ~ 31°C) , Humidity Range: 50% ~ 80% RH (Generally: 65% ~ 75%) ; Transportation condition: Temperature Range: -35°C ~ 85°C , Humidity Range: 50% ~ 95% RH
12. Use components within 6 months. If 6 months or more have elapsed, check soldarability before use.
13. Reflow profile recommend:

Lead-free heat endurance test

Lead-free the recommended reflow condition

