

## PBF1008R1 TYPE

### ●FEATURE

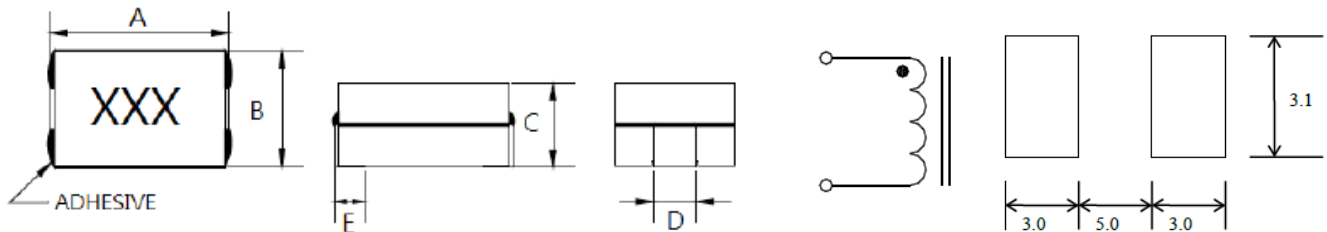
1. SMD Power inductor
2. High current power bead.

### ●Applications

1. Filtering of power input pins of oscillators or logic devices using high speed clocks
2. Preventing oscillations in high frequency amplifiers

### ●Shape and Dimension

### ●Schematics and Land Patterns(mm)



A= 10.5 m/m MAX.; B= 7.9 m/m MAX.; C= 8.0 m/m MAX.;  
D=2.54 m/m REF.; E=2.30 m/m REF.

### ●Specification

Part Number	Ls(nH) @100KHz	DCR (mΩ)±10%	Isat (A) (@25°C)	Irms(A) (Max)
PBF1008R1-R115	115±20%	0.29	75	41
PBF1008R1-R15	150±20%	0.29	72	41
PBF1008R1-R175	175±20%	0.29	62	41
PBF1008R1-R215	215±20%	0.29	48	41
PBF1008R1-R23	230±20%	0.29	43	41
PBF1008R1-R27	270±20%	0.29	37	41
PBF1008R1-R30	300±20%	0.29	32	41

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

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

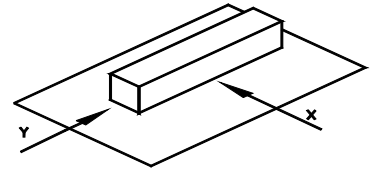
Note3. I<sub>rms</sub>: DC current for an approximate temperature rise of 40°C without core loss.

Note4. Isat: Peak current for approximately 20% roll off at +25°C

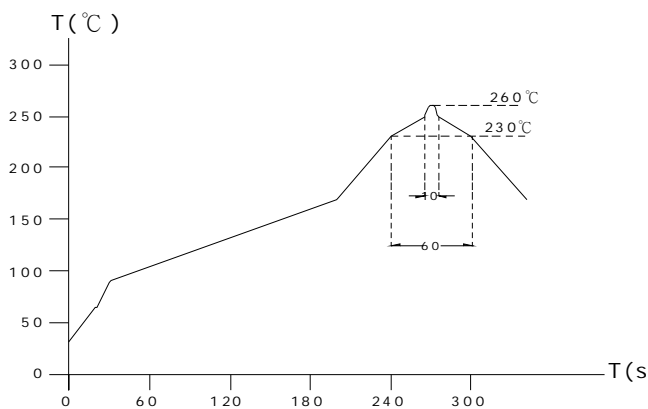
Note5. Inductance tolerance: M: ±20%

## GENERAL CHARACTERISTICS

1. Operating temperature range: -40 TO + 125°C (Includes temperature when the coil is heated)
2. External appearance: On visual inspection, the coil has no external defects.
3. Terminal strength: After soldering. Between copper plate and terminals of coil. Push in two directions of X.Y withstanding 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/s<sup>2</sup> (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 12 months. If 12 months or more have elapsed, check solderability before use.
13. Reflow profile recommend:



Lead-free heat endurance test



Lead-free the recommended reflow condition

