

DUAL PHASE SMT POWER BEADS INDUCTORS

PBD13876L Series



Less boad space and lower cost



High energy storage and low DCR.



Magnetically shielded, suitable for high density mounting.



Ideal for power source circuits, DC-DC convert, DC-AC Inverters inductor and input-Output filter application.



Custom inductance value or tolerance is available.



RoHS compliant



ELECTRICAL SPECIFICATION @ 25°C								
Part Number	Ls ³ @0Adc (nH %)	Ls @ Isat1 (nH TYP)	Rated (Adc)	DCR (m)	Isat2 5		Heating ⁶	Marking
					25 C (Adc)	C (Adc)	Current (Adc TYP)	(XXXY)
PBD13876L-121F	115	115	30	0.29 10% (per phase)	94	78	30A (per phase)	121F
PBD13876L-151F	150	150	30		72	60		151F
PBD13876L-181F	175	175	30		62	52		181F
PBD13876L-221F	215	215	30		48	43		221F
PBD13876L-231F	230	230	30		43	39		231F
PBD13876L-271F	270	270	30		37	33		271F
PBD13876L-301F	300	240	30		32	28		301F

Notes:

1. Ordering Information: PBD13876a - bbbFc.

PBD13876 = Product Type.

a = Tolerance of Inductance ($L = \pm 15\%$).

bbb = Rated inductance value in nH (i.e. 151 = 150nH; 301 = 300nH).

F = Internal Control Code.

c = Packaging Code (T = Tape & Reel Packaging in 13 inch Reel).

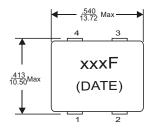
- 2. Inductance is tested at 1Vrms, 100kHz.
- 3. The rated current as listed is either the saturation current or the heating current depending on which value is lower.
- 4. The DCR is measured from point a to point b, as shown on the mechanical drawing.
- 5. The saturation current, Isat, is the typical current which causes the inductance to drop by 20% at the stated ambient temperatures (25°C and 100°C).
- 6. The heating current is the DC current which causes the temperature of the part to increases by approximately 40°C.
- 7. Operating temperature range: -40°C to +125°C.
- 8. The part temperature (ambient temperature + temperature rise) should not exceed the upper limit of the operating temperature under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

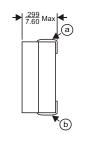


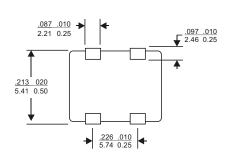
DUAL PHASE SMT POWER BEADS INDUCTORS

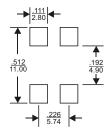
PBD13876 Series

MECHANICAL DIMENSIONS









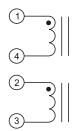
Recommended Pad Layout

Notes:

- 9. All dimensions are specified in $\frac{\text{inches}}{\text{mm}}$ with higher precedence in mm.
- 10. Unless otherwise specified, all tolerances are $\pm \frac{.010}{0.25}$

4.0typ. Weight (in gram) Tape & Reel 400 / reel

SCHEMATIC



FOR MORE INFORMATION, PLEASE CONTACT

HEADQUARTER

1/F., Harbour View 1, No.12 Science Park East Avenue,

Phase II, Hong Kong Science Park, Shatin, N.T.

Hong Kong

Tel: (852) 2954 3333 Fax: (852) 2954 3304

Email: eempl@eleceltek.com

Website: http://www.eleceltek.com / www.eemagnetic.com

Information herein is for reference only and subject to change without notice. It does not constitute any representation, warranty or commitment of the company in respect of the products in any aspect. All logos, brands and product names mentioned herein are trademarks or registered trademarks of their respective owners. The company does not assume any liability arising out of the application or use of any product or circuit described herein. Copyrights 2009, E & E Magnetic Products Limited.

1/F., Harbour View 1, No.12 Science Park East Avenue, Phase II, Hong Kong Science Park, Shatin, N.T. Hong Kong Tel: (852) 2954 3333 • Fax: (852) 2954 3304 2