

Power Inductor

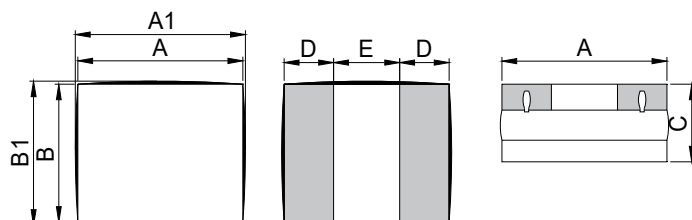
AHP252010RA-SERIES

1. Features

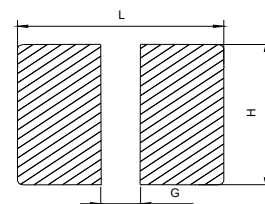
1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature : -40~+125°C (Including self - temperature rise).



2. Dimension



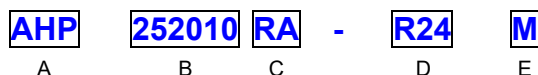
Recommended PC Board Pattern



Series	A(mm)	A1(mm)	B(mm)	B1(mm)	C(mm)	D(mm)	E(mm)
AHP252010RA	2.50±0.20	2.8max	2.00±0.20	2.3max	0.90±0.10	0.8±0.20	0.95±0.20

L(mm)	G(mm)	H(mm)
2.9	0.8	2.2

3. Part Numbering



- A: Series
 B: Dimension
 C: Lead Free
 D: Inductance
 E: Inductance Tolerance
- Material
 R24=0.24uH
 K=±10%, L=±15%, M=±20%, Y=±30%.

4. Specification

Part Number	Inductance (uH) ±20% @ 0 A	I rms (A)	I sat (A)	DCR (Ω)	
				Typ	Max
AHP252010RA-R24M	0.24	5.50	7.50	0.022	0.028
AHP252010RA-R33M	0.33	4.80	6.00	0.025	0.030
AHP252010RA-R47M	0.47	4.30	5.50	0.035	0.040
AHP252010RA-R56M	0.56	4.00	4.80	0.040	0.048
AHP252010RA-R68M	0.68	3.80	4.40	0.045	0.054
AHP252010RA-1R0M	1.00	3.30	3.60	0.062	0.071
AHP252010RA-1R2M	1.20	2.90	3.20	0.070	0.080
AHP252010RA-1R5M	1.50	2.70	2.90	0.080	0.090
AHP252010RA-2R2M	2.20	2.30	2.40	0.120	0.132
AHP252010RA-3R3M	3.30	1.70	2.10	0.190	0.216
AHP252010RA-4R7M	4.70	1.40	1.70	0.245	0.276

Note:

Inductance Test Frequency 1MHz/1V

Heat Rated Current (I_{rms}) will cause the coil temperature rise approximately ΔT of 40°C

Saturation Current (I_{sat}) will cause L0 to drop approximately 30%.

Rated DC current: The lower value of I_{rms} and I_{sat}.

I_{rms} Testing :

Temperature rise is highly dependent on many factors including pcb land pattern, Circuit design, component placement, frequency, cooling system, trace size, and proximity to other components.....etc. There fore temperature rise should be verified in application conditions.

10. Typical Performance Curves

