

Power Inductor

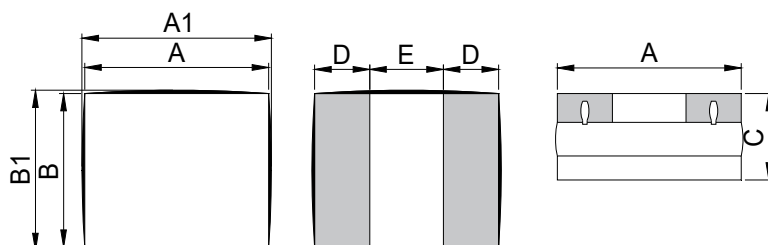
AHP201610RA-SERIES

1. Features

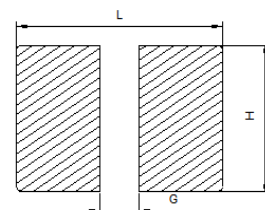
1. This specification applies Low Profile Power Inductors.
2. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
3. Operating temperature :-40~+125°C (Including self - temperature rise)



2. Dimension

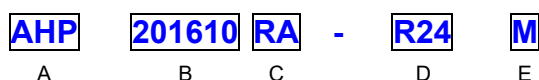


Recommended PC Board Pattern



Series	A(mm)	A1(mm)	B(mm)	B1(mm)	C(mm)	D(mm)	E(mm)	L(mm)	G(mm)	H(mm)
AHP201610RA	2.00±0.20	2.3max	1.60±0.20	1.9max	0.90±0.10	0.65±0.20	0.75±0.20	2.3	0.6	1.9

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	Typ	Max	Typ	Max
AHP201610RA-R24M	0.24	5.60	5.00	7.00	6.00	0.021	0.0252
AHP201610RA-R33M	0.33	5.10	4.60	5.50	5.00	0.028	0.0336
AHP201610RA-R47M	0.47	4.50	4.00	4.80	4.40	0.041	0.0492
AHP201610RA-R68M	0.68	3.80	3.40	4.00	3.50	0.055	0.066
AHP201610RA-1R0M	1.00	3.10	2.80	3.60	3.10	0.075	0.090
AHP201610RA-1R5M	1.50	2.40	2.10	3.10	2.70	0.115	0.138
AHP201610RA-2R2M	2.20	1.90	1.60	2.40	2.10	0.170	0.204
AHP201610RA-3R3M	3.30	1.50	1.30	1.60	1.30	0.190	0.218
AHP201610RA-4R7M	4.70	1.30	1.10	1.40	1.20	0.320	0.384

Note:

Inductance Test Frequency 1MHz/1V

Heat Rated Current (Irms) will cause the coil temperature rise approximately ΔT of 40°C

Saturation Current (Isat) will cause L0 to drop approximately 30%.

Rated DC current: The lower value of Irms and Isat.

Irms 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

