

Power Choke Coil HMLQ20161B MDR type

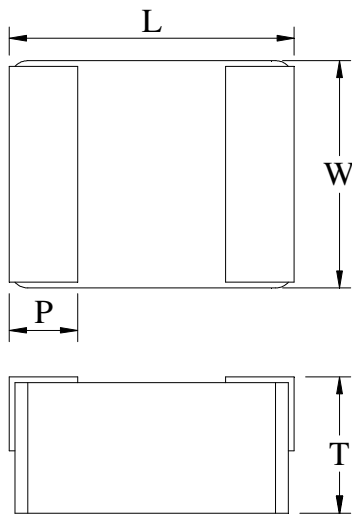
■ Features

High performance (Isat) realized by metal dust core.
 Low profile : 2.0 mm x 1.6 mm x 1.2 mm
 Low loss realized with low DCR
 100% lead (Pb) free meet RoHS standard

■ Application

DC/DC converter for CPU in Notebook PC
 Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..
 Thin type on-board power supply module for exchanger
 VRM for server

■ Outline Dimensions

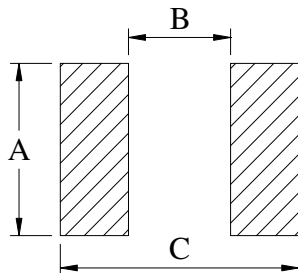


Code	Dimensions
L	2.0 ± 0.1
W	1.6 ± 0.1
T	1.2 Max.
P	0.5 ± 0.2

Unit : mm

■ Recommend Land Pattern Dimensions

The customer shall determine the land dimensions shown below after confirming and safety.

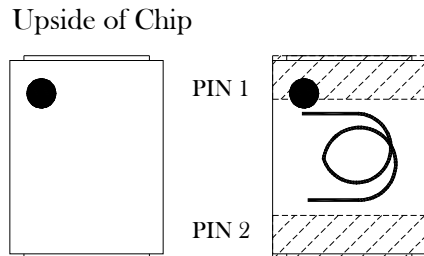


A	1.6
B	0.7
C	2.0

Unit : mm

■ Marking

The point on the top surface represents winding direction of choke.



Coil clockwise around

■ Specifications

Part Number	L0 Inductance (μH) @ (0A)	R_{dc} ($\text{m}\Omega$)		Heat Rating Current DC Amps. I_{dc} (A)		Saturation Current DC Amps. I_{sat} (A)	
		Typical	Maximum	Typical	Maximum	Typical	Maximum
HMLQ20161B-R47MDR	0.47	20	26	5.10	4.60	5.80	5.00
HMLQ20161B-1R0MDR	1.0	45	55	3.40	3.00	4.25	3.85

* : If you require another part number please contact with us.

** : Inductance Tolerance $\pm 20\%$

Note 1. : All test data is referenced to 25°C ambient.

Note 2. : Test Condition: 1MHz, 1.0Vrms

Note 3. : I_{dc} : DC current (A) that will cause an approximate ΔT of 40°C

Note 4. : I_{sat} : DC current (A) that will cause L0 to drop approximately 30%

Note 5. : Operating Temperature Range -55°C to $+125^{\circ}\text{C}$

Note 6. : The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design , component placement, PCB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

Note 7. : The rated current as listed is either the saturation current or the heating current depending on which value is lower.

Current Characteristic

