Power Choke Coil HMMQ20161T MDR type

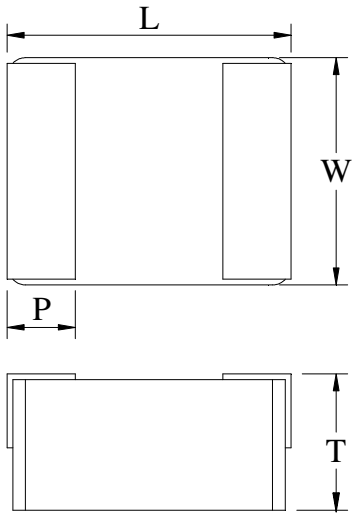
Features

High performance (Isat) realized by metal dust core.
Low profile：2.0 mm x 1.6 mm x 1.0 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

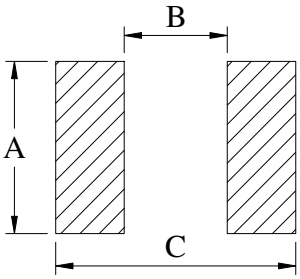


Code	Dimensions
L	2.0 ± 0.1
W	1.6 ± 0.1
T	1.0 Max.
P	0.5 ± 0.2

Unit : mm

Recommend Land Pattern Dimensions

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



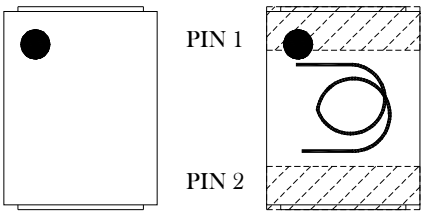
A	1.6
B	0.7
C	2.0

Unit : mm

Marking

The square point on the top surface represents polarity of choke.

Upside of Chip



Coil clockwise around

Specifications

Part Number	L0 Inductance (μH) @ (0A)	R_{dc} (mΩ)		Heat Rating Current DC Amps. Idc (A)		Saturation Current DC Amps. Isat (A)	
		Typical	Maximum	Typical	Maximum	Typical	Maximum
HMMQ20161T-R24MDR	0.24	18	23	5.1	4.5	6.7	6.1
HMMQ20161T-R33MDR	0.33	21	26	4.3	4.1	5.1	4.6
HMMQ20161T-R47MDR	0.47	26	32	4.4	4.05	4.9	4.45
HMMQ20161T-R68MDR	0.68	40	50	3.4	3.1	4.6	4.0
HMMQ20161T-1R0MDR	1.0	49	59	3.2	3.0	3.9	3.65
HMMQ20161T-1R5MDR	1.5	99	109	2.35	2.05	3.0	2.7
HMMQ20161T-2R2MDR	2.2	142	150	2.2	2.0	2.65	2.45

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

**：Inductance Tolerance ± 20%

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

Note 2.： Test Condition:1MHz, 1.0Vrms

Note 3.： Idc : DC current (A) that will cause an approximate ΔT of 40℃

Note 4.： Isat : DC current (A) that will cause L0 to drop approximately 30%

Note 5.： Operating Temperature Range -55℃ to + 125℃

Note 6.： The part temperature (ambient + temp rise) should not exceed 125℃ 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