

Power Choke Coil MHIC0630 type

■ Features

High performance (Isat) realized by metal dust core.

Low profile : Thickness max. 3.0mm

Low loss realized with low DCR

Capable of corresponding high frequency (3MHz)

100% lead (Pb) free meet RoHS standard

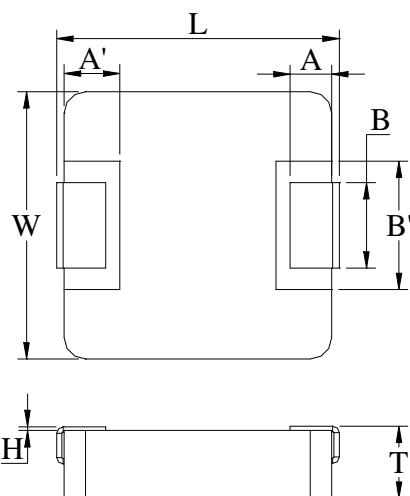
■ Application

DC/DC converter for CPU in Notebook PC

Thin type on-board power supply module for exchanger

VRM for server

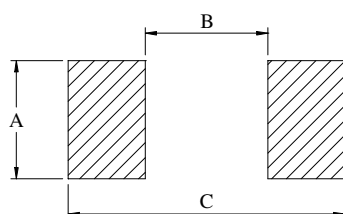
■ Outline Dimensions



Code	Dimensions (mm)
L	6.95 ± 0.35
W	6.6 ± 0.2
T	2.8 ± 0.2
A	1.6 ± 0.3
A'	2.0 ± 0.1
B	3.0 ± 0.3
B'	3.6 ± 0.2
H	0 ~ +0.15

■ Recommend Land Pattern Dimensions

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



A	3.5
B	3.7
C	8.4

Unit : mm



■ Specifications

Part Number	L0 Inductance (μH) @ (0A)	R_{dc} (m Ω)		Heat Rating Current DC Amps. I _{dc} (A)	Saturation Current DC Amps. I _{sat} (A)
		Typical	Maximum	Typical	Typical
MHIC0630-R10M	0.10	1.5	1.7	32.5	60.0
MHIC0630-R20M	0.20	2.4	3.0	24.0	41.0
MHIC0630-R22M	0.22	2.5	2.8	23.0	40.0
MHIC0630-R33M	0.33	3.5	3.9	20.0	30.0
MHIC0630-R47M	0.47	4.0	4.2	17.5	26.0
MHIC0630-R56M	0.56	4.7	5.0	16.5	25.5
MHIC0630-R68M	0.68	5.0	5.5	15.5	25.0
MHIC0630-R75M	0.75	5.4	6.2	14.0	24.5
MHIC0630-R82M	0.82	6.7	8.0	13.0	24.0
MHIC0630-1R0M	1.0	9.0	10.0	11.0	22.0
MHIC0630-1R2M	1.2	10.0	12.0	10.0	20.0
MHIC0630-1R5M	1.5	14.0	15.0	9.0	18.0
MHIC0630-2R0M	2.0	16.0	18.0	8.2	14.0
MHIC0630-2R2M	2.2	18.0	20.0	8.0	14.0
MHIC0630-2R5M	2.5	20.0	22.0	7.0	14.0
MHIC0630-3R3M	3.3	28.0	30.0	6.0	13.5
MHIC0630-4R7M	4.7	37.0	40.0	5.5	10.0
MHIC0630-6R8M	6.8	54.0	60.0	4.5	8.0

*: 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: 100KHz, 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 20%

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

Note 6. : The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design , component placement, PWB 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

