

Power Choke Coil MHIB1770 type

■ Features

High performance (Isat) realized by metal dust core.

Low profile : Thickness max. 7.0mm

Low loss realized with low DCR

Capable of corresponding high frequency (1MHz)

100% lead (Pb) free meet RoHS standard

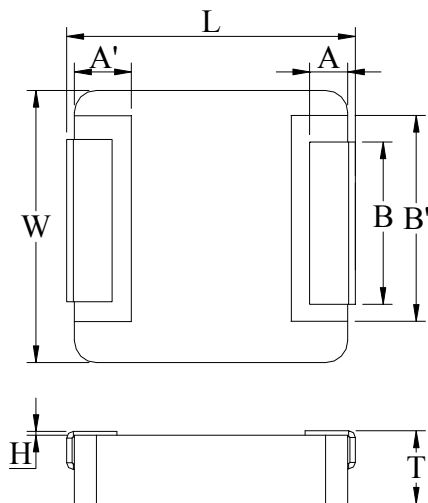
■ Application

DC/DC converter for CPU in Notebook PC

Thin type on-board power supply module for exchanger

VRM for server

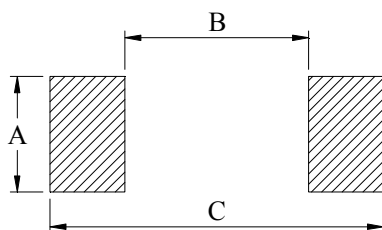
■ Outline Dimensions



Code	Dimensions (mm)	
	Other type	330
L	17.15 ± 0.35	17.15 ± 0.127
W	17.15max	
T	6.8 ± 0.2	
A	2.5 ± 0.5	
A'	3.5 ± 0.1	
B	12.0 ± 0.3	11.94 ± 0.3
B'	13.0 ± 0.5	
H	0 ~ +0.3	

■ Recommend Land Pattern Dimensions

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



A	12.8
B	11.2
C	18.2

Unit : mm



■ 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	Typical
MHIB1770-1R5M	1.5	1.85	2.15	40.0	40.0
MHIB1770-2R2M	2.2	2.15	2.5	37.0	34.0
MHIB1770-4R7M	4.7	4.12	4.72	27.0	24.0
MHIB1770-6R8M	6.8	6.55	7.55	20.0	22.0
MHIB1770-8R2M	8.2	8.1	8.7	16.0	20.0
MHIB1770-100M	10.0	9.3	10.0	14.0	18.0
MHIB1770-150M	15.0	14.5	15.5	12.0	13.0
MHIB1770-200M	20.0	19.5	21.9	9.7	12.0
MHIB1770-220M	22.0	20.5	23.0	9.5	11.0
MHIB1770-330M	33.0	35.1	37.0	9.0	10.0
MHIB1770-470M	47.0	41.0	47.0	6.8	7.5
MHIB1770-680M	68.0	74.0	85.0	5.2	6.5

* : 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 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, 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

