

Power Choke Coil PIMB041B type

■ Features

High performance (Isat) realized by metal dust core.

Low profile : Thickness max. 1.2mm

Low loss realized with low DCR

Capable of corresponding high frequency (1MHz)

100% lead (Pb) free meet RoHS standard

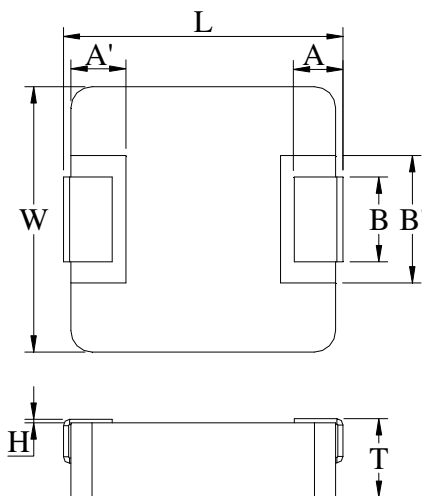
■ Application

DC/DC converter for CPU in Notebook PC

Thin type on-board power supply module for exchanger

VRM for server

■ Outline Dimensions

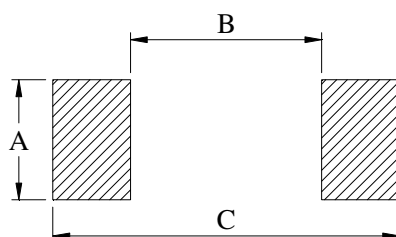


Code	Dimensions
L	4.4 ± 0.35
W	4.2 ± 0.25
T	1.0 ± 0.2
A	0.8 ± 0.3
A'	1.0 ± 0.1
B	2.0 ± 0.3
B'	2.5 ± 0.2
H	$0 \sim +0.15$

Unit : mm

■ Recommend Land Pattern Dimensions

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



A	2.5
B	2.2
C	5.2

Unit : mm

■ Specifications

Part Number	L0 Inductance (μH) @ (0A)	R_{dc} (m Ω)		Heat Rating Current DC Amps. Idc (A)	Saturation Current DC Amps. Isat (A)
		Typical	Maximum	Typical	Typical
PIMB041B-R33MS	0.33	17.0	19.0	6.5	8.4
PIMB041B-R47MS	0.47	19.0	21.0	6.0	6.8
PIMB041B-R68MS	0.68	32.0	36.0	4.5	6.0
PIMB041B-1R0MS	1.0	43.0	47.0	4.2	5.2
PIMB041B-1R5MS	1.5	68.0	75.0	3.25	4.0
PIMB041B-2R2MS	2.2	79.4	83.5	2.75	3.5
PIMB041B-4R7MS	4.7	175.0	195.0	1.8	2.8

* : 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. : Idc : DC current (A) that will cause an approximate ΔT of 40°C

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

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

Note 6. : The part temperature (ambient + temp rise) should not exceed 125°C under worse 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

