Power Choke Coil PCMB042T type

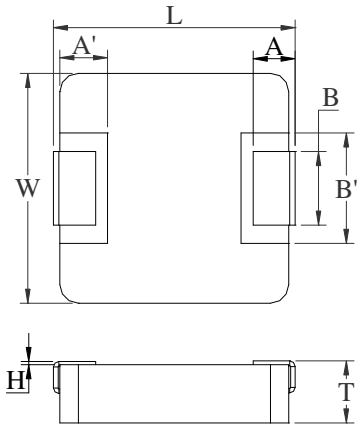
Features

High performance (Isat) realized by metal dust core.
Low profile：Thickness max. 2.0mm
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

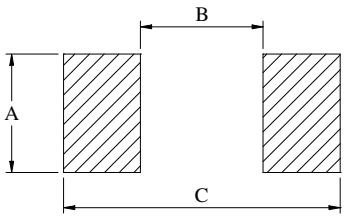
Outline Dimensions



Code	Dimensions (mm)
L	4.15 ± 0.35
W	4.0 ± 0.3
T	1.8 ± 0.2
A	0.8 ± 0.3
A’	1.0 ± 0.1
B	1.5 ± 0.3
B’	2.2 ± 0.2
H	0 ~ +0.15

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} (mΩ)		Heat Rating Current DC Amps. Idc (A)	Saturation Current DC Amps. Isat (A)
		Typical	Maximum	Typical	Typical
PCMB042T-R10MS	0.10	3.5	4.0	12.0	22.0
PCMB042T-R22MS	0.22	6.0	6.6	9.0	12.5
PCMB042T-R47MS	0.47	12.5	14.0	7.0	9.5
PCMB042T-1R0MS	1.0	24.0	27.0	4.5	7.0
PCMB042T-1R5MS	1.5	38.0	46.0	4.0	6.0
PCMB042T-2R2MS	2.2	52.0	58.0	3.0	5.0
PCMB042T-3R3MS	3.3	74.0	87.0	2.5	4.0

*：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.： Idc : DC current (A) that will cause an approximate △T of 40℃

Note 3.： Isat : DC current (A) that will cause Lo to drop approximately 30%

Note 4.： Operating Temperature Range -55℃ to + 125℃

Note 5.： The part temperature (ambient + temp rise) should not exceed 125℃ 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 6.： The rated current as listed is either the saturation current or the heating current depending on which value is lower.

Current Characteristic