# CYNTEC CO., LTD.

# 乾坤科技股份有限公司

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### Power Choke Coil PCMB041B 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

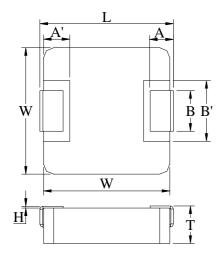
### Application

DC/DC converter for CPU in Notebook PC

Thin type on-board power supply module for exchanger

VRM for server

#### Outline Dimensions

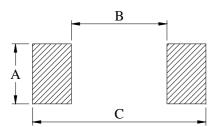


Code	Dimensions				
L	$4.4 \pm 0.35$				
W	$4.2 \pm 0.25$				
T	$1.0 \pm 0.2$				
A	$0.8 \pm 0.3$				
A'	$1.0 \pm 0.1$				
В	$2.0 \pm 0.3$				
B'	$2.5 \pm 0.2$				
Н	0 ~ +0.15				

Unit: mm

#### Recommend Land Pattern Dimensions

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



A	2.5		
В	2.2		
С	5.2		

Unit: mm

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### Specifications

Part Number	L0 Inductance ( µH ) @ (0A)	$R_{dc}(m\Omega)$		Heat Rating Current DC Amps. Idc ( A )	Saturation Current DC Amps. Isat ( A )
		Typical	Maximum	Typical	Typical
PCMB041B-1R0MS	1.0	43.0	47.0	4.2	5.2
PCMB041B-2R2MS	2.2	79.4	83.5	2.75	3.5

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

\*\* : Inductance Tolerance ± 20%

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

Note 2. : Idc : DC current (A) that will cause an approximate  $\triangle T$  of  $40^{\circ}$ C

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

Note 4. : Operating Temperature Range  $-55^{\circ}$ C to  $+ 125^{\circ}$ C

Note 5.: 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 6. : The rated current as listed is either the saturation current or the heating current depending on which value is lower.