

Power Choke Coil HMLQ25201T MSR Type

■ Features

High performance (Isat) realized by metal dust core.

Low profile : 2.5 mm x 2.0 mm x 1.0 mm

Low loss realized with low DCR

100% lead (Pb) free meet RoHS standard

■ Application

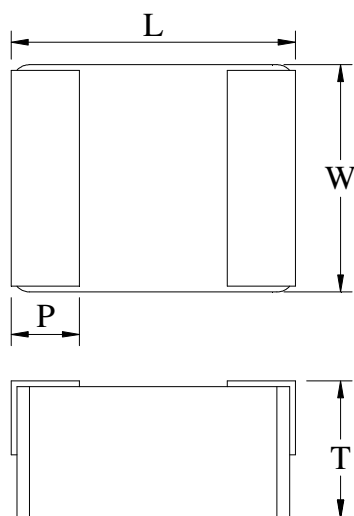
DC/DC converter for CPU in Notebook PC

Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..

Thin type on-board power supply module for exchanger

VRM for server

■ Outline Dimensions

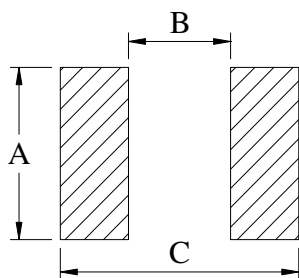


Code	Dimensions
L	2.5 ± 0.2
W	2.0 ± 0.2
T	1.0 Max.
P	0.6 ± 0.2

Unit : mm

■ Recommend Land Pattern Dimensions

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

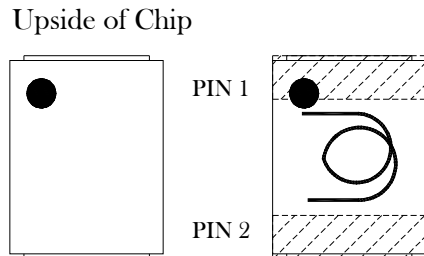


A	2.0
B	1.2
C	2.8

Unit : mm

■ Marking

The point on the top surface represents winding direction of choke.



Coil clockwise around

■ 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	Maximum	Typical	Maximum
HMLQ25201T-R33MSR	0.33	16	20	5.5	5.0	7.3	7.0
HMLQ25201T-R47MSR	0.47	19	25	4.3	3.7	5.6	5.0
HMLQ25201T-1R0MSR	1.0	44	53	3.7	3.4	5.0	4.3
HMLQ25201T-2R2MSR	2.2	89	102	2.4	2.2	3.4	3.0
HMLQ25201T-4R7MSR	4.7	220	262	1.6	1.45	2.0	1.8

* : 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: 1MHz, 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, PCB 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

