

### Power Choke Coil HMLE32251E MSR type

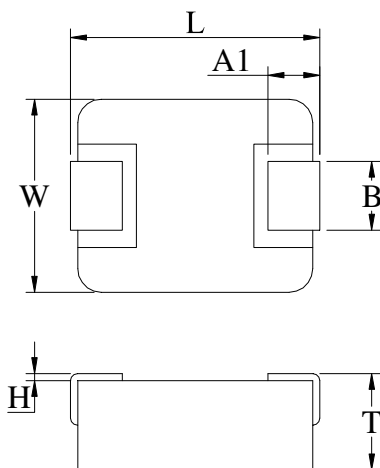
#### ■ Features

High performance (Isat) realized by metal dust core.  
 Low profile : 3.2mm x 2.5mm x 1.5mm  
 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

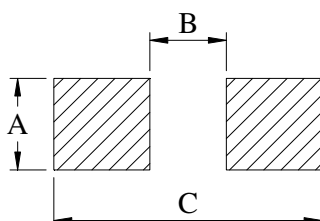
#### ■ Outline Dimensions



Code	Dimensions (mm)
L	3.2 ± 0.2
Lw	3.0 ± 0.2
W	2.5 ± 0.2
T	1.3 ± 0.2
A	0.7 ± 0.3
B	1.2 ± 0.3
H	0 ~ +0.15

#### ■ Recommend Land Pattern Dimensions

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

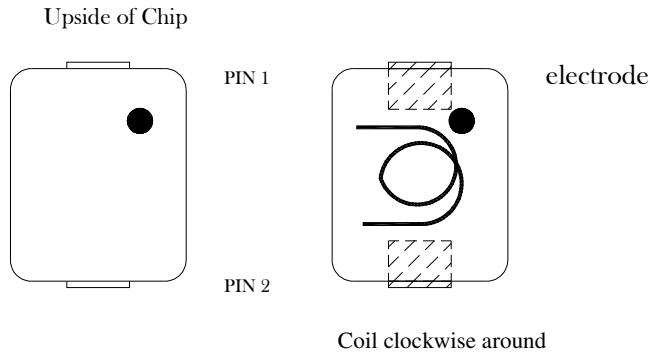


A	1.2
B	1.0
C	3.5

Unit : mm

### ■ Marking

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



### ■ Specifications

Part Number	L0 Inductance ( $\mu\text{H}$ ) @ (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
HMLE32251E-R47MSR	0.47	13	16	7.0	6.3	8.1	7.2
HMLE32251E-1R0MSR	1.0	27	33	4.4	4.0	5.1	4.6
HMLE32251E-2R2MSR	2.2	73	88	3.9	3.5	4.3	3.7

\* : 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  $\Delta T$  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°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

