

## Sealed Choke Coil SDES052T type

### ■ Features

Low profile : 4.9mm x 4.9mm x 2.0 mm

Low coil resistance with large currents.

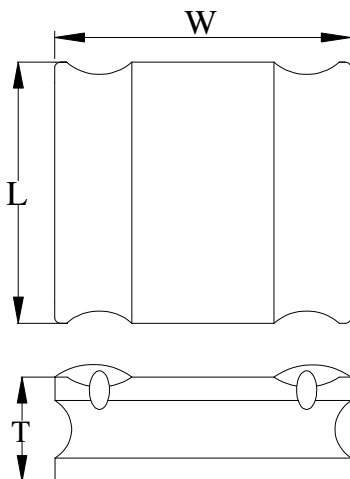
High magnetic shield construction should actualize high resolution for EMC protection.

100% lead (Pb) free meet RoHS standard

### ■ Application

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

### ■ Outline Dimensions



Code	Dimensions (mm)
L	4.9 ± 0.2
W	4.9 ± 0.2
T	2.0 max.

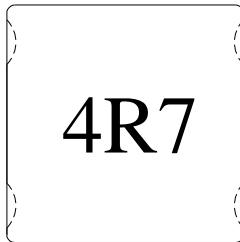
Note : This graph is in regard to outline dimensions spec. For outer appearance, please refer to actual product.

■ **Marking**

The inductor is marked with a 3-digit code

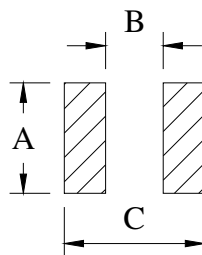
Example -- 4.7 $\mu$ H → 4R7

Upside of Chip



■ **Recommend Land Pattern Dimensions**

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



A	4.0
B	2.1
C	5.1

Unit : mm

■ Specifications

Part Number	L0 Inductance ( $\mu$ H ) @ (0A)	R <sub>dc</sub> ( m $\Omega$ )		Heat Rating Current DC Amps. I <sub>dc</sub> ( A )		Saturation Current DC Amps. I <sub>sat</sub> ( A )	
		Typical	Maximum	Typical	Maximum	Typical	Maximum
SDES052T-1R0MS	1.0	17.0	21.0	4.8	4.32	6.3	5.7
SDES052T-1R5MS	1.5	23.0	27.5	4.2	3.8	5.0	4.5
SDES052T-2R2MS	2.2	26.0	32.0	4.0	3.6	4.2	3.8
SDES052T-3R3MS	3.3	42.0	51.0	2.7	2.4	3.3	3.0
SDES052T-4R7MS	4.7	52.0	63.0	2.7	2.4	3.1	2.8
SDES052T-6R8MS	6.8	74.0	88.0	2.30	2.05	2.60	2.35
SDES052T-100MS	10.0	114.0	137.0	1.8	1.62	1.65	1.50

\* : 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<sub>dc</sub> : DC current (A) that will cause an approximate  $\Delta T$  of 40°C

Note 4. : I<sub>sat</sub> : 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

