

Delta Part No . : SDES053T type

Part Name : Sealed Choke

## Sealed Choke Coil SDES053T type

### ■ Features

Low profile : 4.9mm x 4.9mm x 3.0 mm

Low coil resistance with large currents.

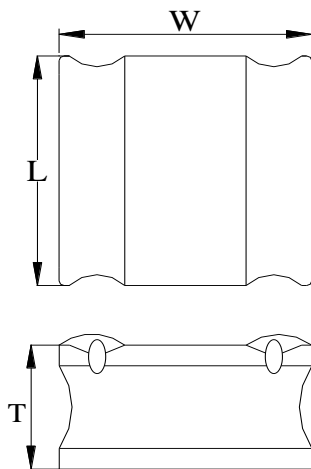
High magnetic shield construction should actualize high resolution for EMC protection.

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	3.0 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

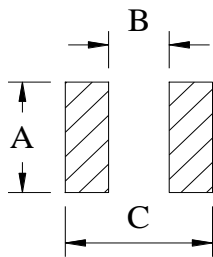
Example -- 4.7 $\mu$ H → 4R7

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 ( $\mu\text{H}$ ) @ (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
SDES053T-1R0MS	1.0	15	18	7.65	6.9	8.45	7.6
SDES053T-1R2MS	1.2	17	20	6.30	5.67	7.50	6.75
SDES053T-1R5MS	1.5	20	25	6.25	5.63	6.95	6.20
SDES053T-2R2MS	2.2	23	28	6.00	5.40	5.80	5.22
SDES053T-3R3MS	3.3	28	34	5.50	4.90	5.00	4.50
SDES053T-4R7MS	4.7	41	50	4.80	4.30	4.00	3.60
SDES053T-6R8MS	6.8	58	70	3.70	3.30	3.50	3.15
SDES053T-8R2MS	8.2	72	87	3.20	2.88	3.10	2.80
SDES053T-100MS	10.0	85	102	3.05	2.75	2.70	2.40
SDES053T-220MS	22.0	180	220	1.80	1.60	1.80	1.60
SDES053T-330MS	33.0	255	307	1.50	1.35	1.60	1.44
SDES053T-470MS	47.0	334	401	1.20	1.08	1.20	1.08
SDES053T-560MS	56.0	444	532.8	0.90	0.80	1.15	1.04
SDES053T-680MS	68.0	529	634.8	0.85	0.77	1.10	1.00

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

\*\* : Inductance Tolerance  $\pm 20\%$

Note 1. : All test data is referenced to  $25^{\circ}\text{C}$  ambient.

Note 2. : Test Condition:100KHz, 1.0Vrms

Note 3. :  $I_{dc}$  : DC current (A) that will cause an approximate  $\Delta T$  of  $40^{\circ}\text{C}$

Note 4. :  $I_{sat}$  : DC current (A) that will cause L0 to drop approximately 30%

Note 5. : Operating Temperature Range  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$

Note 6. : The part temperature (ambient + temp rise) should not exceed  $125^{\circ}\text{C}$  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

