

## New Product

**SURFACE MOUNT  
SHIELDED POWER INDUCTOR  
SERIES SSI503**

### FEATURES

- RoHS compliant
- High current capability
- Minimum board space

### ELECTRICAL SPECIFICATIONS

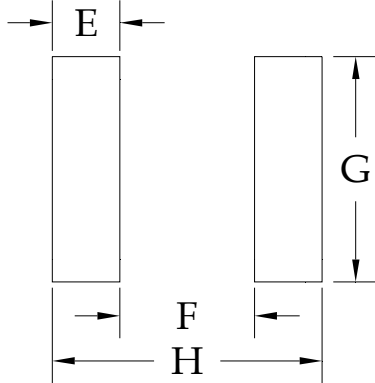
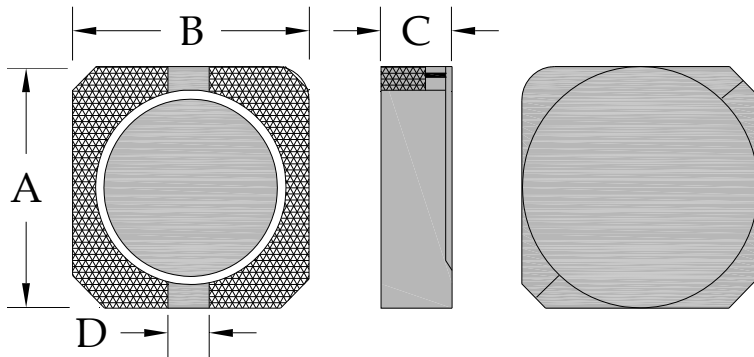
- Inductance range                    1.2uH to 390uH
- Test condition                        100mVrms, 100kHz
- Test equipment                        Quadtech 1750 LCR Meter

### PHYSICAL SPECIFICATIONS

- Operating temp.                        -25°C to +105°C
- Core                                        Ferrite
- Packaging                                 T & R 2500 pieces per reel
- Tape & reel spec.                        Tape 12 mm embossed carrier  
Reel 330 mm

### Dimensions in millimeters

- Length A                                    5.0 max
- Width B                                    5.0 max
- Height C                                    3.0 max
- Terminal pitch D                        1.5 ref



### Suggested PCB land pattern

- E = 1.9
- F = 1.5
- G = 5.3
- H = 5.3

### SPECIFICATIONS

Part Number	L(uH)	Tol ± %	DCR (ohms) max	Rated Current (A) (Note 1)
SSI503-1R2Y	1.2	30	0.024	2.56
SSI503-1R8Y	1.8	30	0.028	2.20
SSI503-2R2Y	2.2	30	0.031	2.04
SSI503-2R7Y	2.7	30	0.043	1.60
SSI503-3R3Y	3.3	30	0.049	1.57
SSI503-3R9Y	3.9	30	0.065	1.44
SSI503-4R7Y	4.7	30	0.072	1.32
SSI503-5R6Y	5.6	30	0.101	1.17
SSI503-6R8Y	6.8	30	0.109	1.12
SSI503-8R2Y	8.2	30	0.118	1.04
SSI503-100Y	10	30	0.128	1.00
SSI503-120Y	12	30	0.132	0.84
SSI503-150Y	15	30	0.149	0.76
SSI503-180Y	18	30	0.166	0.72
SSI503-220Y	22	30	0.235	0.70
SSI503-270Y	27	30	0.261	0.58
SSI503-330Y	33	30	0.378	0.56
SSI503-390Y	39	30	0.384	0.50
SSI503-680Y	68	30	0.699	0.35
SSI503-820Y	82	30	0.915	0.32
SSI503-101Y	100	30	1.02	0.29
SSI503-121M	120	20	1.27	0.27
SSI503-151M	150	20	1.35	0.24
SSI503-181M	180	20	1.54	0.22
SSI503-221M	220	20	1.72	0.20
SSI503-271M	270	20	2.10	0.16
SSI503-331M	330	20	2.75	0.14
SSI503-391M	390	20	3.30	0.13

#### Notes:

1. Based on  $\Delta L$  of 35% max or  $\Delta T$  of 40°C max, whichever occurs first.

All test data based on 25°C ambient. Part temperature (ambient+temp rise) must not exceed max operating temperature under worst case operating conditions. Circuit design, components, PCB trace size and thickness, airflow and other cooling provisions all effect the part temperature.