



SC Series • Low Profile Power Inductors • SMD & THT

Features

- Operating frequency to 1 MHz
- High energy storage with minimum saturation
- High stability from no load to full load
- Pick and place compatible
- Designed as 1:1 Coupled Inductor (Series or Parallel) or as 1:1 Isolation Transformer
- Manufactured in an ISO-9001:2000, TS-16949:2002 and ISO-14001:2004 certified Talema facility
- Meets lead free reflow level J-STD-020C
- Fully RoHS compliant



Electrical Specifications at 25°C

Test frequency: Inductance measured @ 10kHz/10mV

Test Voltage between windings: 500Vrms

Operating Temperature: -40°C to +130°C

Climatic category: IEC68-1 40/130/56

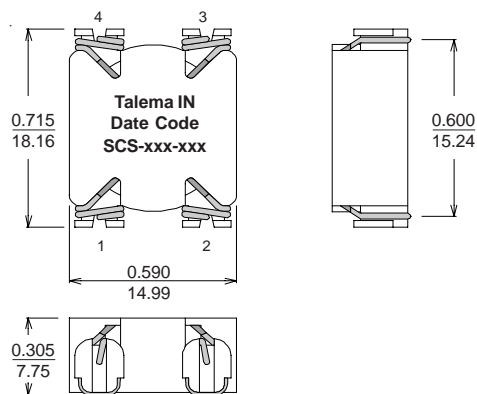
| Part Number | Parallel Connected | | | | | Series Connected | | | | | Energy Storage (μJ) ² |
|---------------|----------------------------|-------------------------------------|--|----------|--------------------------|----------------------------|-------------------------------------|--|----------|--------------------------|---|
| | Rated Current (I_{DC}) | L_N (μH) @ I rated | L_O (μH) $\pm 20\%$ No Load | DCR mOhm | ET (V- μsec) | Rated Current (I_{DC}) | L_N (μH) @ I rated | L_O (μH) $\pm 20\%$ No Load | DCR mOhm | ET (V- μsec) | |
| SCS-14.4-1.5 | 14.40 | 1.5 | 2.2 | 4.4 | 4.8 | 7.20 | 6.0 | 8.8 | 17.6 | 9.6 | 159.0 |
| SCS-11.2-2.4 | 11.20 | 2.4 | 3.5 | 6.5 | 6.0 | 5.60 | 9.6 | 14.0 | 28.6 | 12.0 | 152.8 |
| SCS-8.2-4.2 | 8.20 | 4.2 | 5.9 | 10.5 | 7.9 | 4.10 | 16.8 | 23.6 | 42.0 | 15.8 | 142.6 |
| SCS-6.8-5.8 | 6.80 | 5.8 | 7.9 | 15.0 | 9.1 | 3.40 | 23.2 | 31.6 | 60.0 | 18.2 | 133.8 |
| SCS-5.7-7.6 | 5.70 | 7.6 | 10.1 | 21.0 | 10.3 | 2.85 | 30.4 | 40.4 | 84.0 | 20.6 | 124.2 |
| SCS-5.4-12.1 | 5.40 | 12.1 | 18.5 | 23.3 | 13.9 | 2.70 | 48.4 | 74.0 | 93.2 | 27.8 | 176.6 |
| SCS-4.4-18.0 | 4.40 | 18.0 | 27.4 | 38.2 | 16.5 | 2.20 | 72.0 | 109.6 | 152.8 | 33.0 | 174.3 |
| SCS-3.54-27.0 | 3.54 | 27.0 | 40.5 | 53.2 | 20.5 | 1.77 | 108.0 | 162.0 | 212.8 | 41.0 | 169.1 |
| SCS-3.0-34.8 | 3.00 | 34.8 | 50.5 | 74.0 | 22.5 | 1.50 | 139.2 | 202.0 | 296.0 | 45.0 | 156.5 |

Talema's engineering staff can assist in the design of other inductance values and sizes.

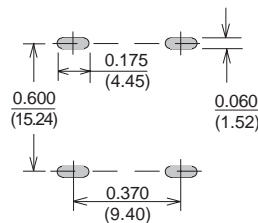
Note: When ordering, add "S" or "T" to the basic part number to denote preferred mounting style. Example: SCS-14.4-1.5 for SMD or SCT-14.4-1.5 for THT mounting.

Dimensions

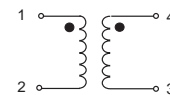
Type SCS



Suggested Pad Layout



Schematic



Dimensions: Inches (Millimeters)

Tolerance: ± 0.010 (0.25) unless specified otherwise

Germany: Int.+4989-841 00-0 • Ireland: Int.+35 374 - 954 8666 • Czech Rep: Int.+420 377 - 338 351 • India: Int.+91 427 - 244 1325
<http://www.talema-nuvotem.com> (02-07) SC Series