



CMP Series Common Mode Toroidal Chokes

Features

- Designed for DC/DC Converters
- Excellent Impedance characteristics with optimum size to current ratio
- SMD design ideal for pick and place compatability
- Manufactured in 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 @ 25°C

Test voltage between windings: 1000 Vrms

Operating temperature range: -40°C to +125°C

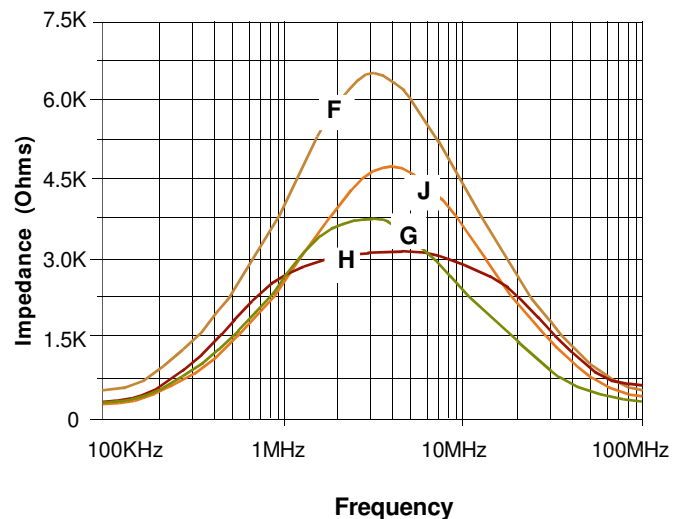
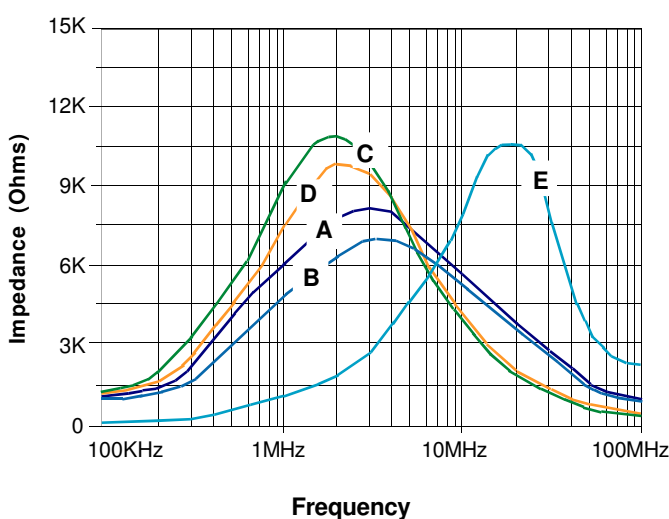
Climatic Category: IEC68-1 40/125/56

Test frequency: Inductance measured @ 10KHz / 10mV

| Part Number | Turns Ratio ±2% | Rated Current (I _{DC}) | Inductance (mH) ±35% | Leakage Inductance (µH Nominal) | DCR Maximum (mOhm) | Schematic | Package Size Code | | Impedance Curve | Weight (Grams) |
|-----------------|--------------------|-------------------------------------|----------------------------|------------------------------------|-----------------------|-----------|-------------------|------|-----------------|----------------|
| | | | | | | | SMD | THT | | |
| CMP__-1.22-1.17 | 1 : 1 | 1.22 | 1.170 | 8.296 | 200 | A | SC2 | TC2 | A | 1.1 |
| CMP__-1.63-0.88 | 1 : 1 | 1.63 | 0.884 | 5.807 | 110 | A | SC2 | TC2 | B | 1.3 |
| CMP__-2.80-1.47 | 1 : 1 | 2.80 | 1.470 | 9.630 | 80 | A | SC5 | TC5 | C | 4.0 |
| CMP__-3.30-1.32 | 1 : 1 | 3.30 | 1.320 | 8.130 | 60 | A | SC5 | TC5 | D | 4.3 |
| CMP__-3.30-0.23 | 1 : 1 | 3.30 | 0.225 | 8.175 | 60 | A | SC5 | TC5 | E | 4.4 |
| CMP__-4.70-0.77 | 1 : 1 | 4.70 | 0.768 | 4.559 | 40 | A | SC5 | TC5 | F | 4.6 |
| CMP__-5.60-0.59 | 1 : 1 | 5.60 | 0.590 | 3.891 | 28 | A | SC5 | TC5 | J | 5.0 |
| CMPS-1.22-1.17P | 1 : 1 | 1.22 | 1.170 | 8.296 | 200 | B | SC2 | -- | A | 1.1 |
| CMPS-1.63-0.88P | 1 : 1 | 1.63 | 0.884 | 5.807 | 110 | B | SC2 | -- | B | 1.3 |
| CMPS-2.80-1.47P | 1 : 1 | 2.80 | 1.470 | 9.630 | 80 | B | SC5 | -- | C | 4.0 |
| CMPS-3.30-1.32P | 1 : 1 | 3.30 | 1.320 | 8.130 | 60 | B | SC5 | -- | D | 4.3 |
| CMPS-3.30-0.23P | 1 : 1 | 3.30 | 0.225 | 8.175 | 60 | B | SC5 | -- | E | 4.4 |
| CMPS-4.70-0.77P | 1 : 1 | 4.70 | 0.768 | 4.559 | 40 | B | SC5 | -- | F | 4.6 |
| CMPS-5.60-0.59P | 1 : 1 | 5.60 | 0.590 | 3.891 | 20 | B | SC5 | -- | J | 5.0 |
| CMP__-7.20-0.53 | 1 : 1 | 7.20 | 0.530 | 4.536 | 15 | - | SHC6 | THC6 | H | 7.3 |
| CMPS-9.70-0.81 | 1 : 1 | 9.70 | 0.809 | 7.408 | 14 | - | SHC7 | -- | F | 13.0 |
| CMPS-11.6-0.63 | 1 : 1 | 11.6 | 0.630 | 5.482 | 10 | - | SHC7 | -- | J | 14.0 |
| CMPS-14.0-0.47 | 1 : 1 | 14.0 | 0.473 | 4.531 | 8 | - | SHC7 | -- | G | 14.0 |

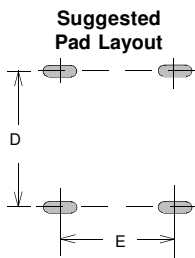
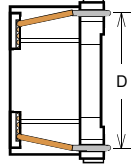
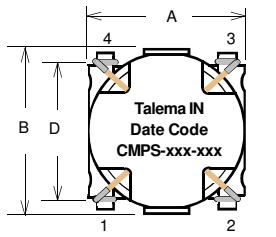
Note: When ordering, add "S" or "T" to the basic part number to denote preferred mounting style. **Example:** CMPS-1.22-1.17 for SMD or CMPT-1.22-1.17 for through hole.

IMPEDANCE CURVES

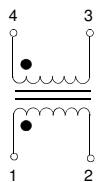


CMP Series Surface Mount Common Mode Toroidal Chokes

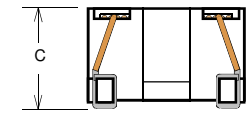
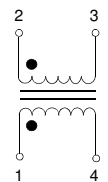
SC2 & 5



Schematic A

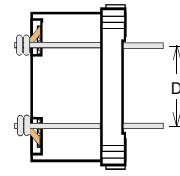
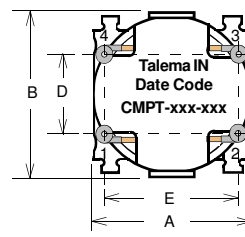


Schematic B

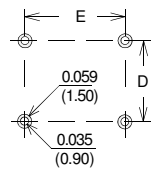


Surface Coplanarity will be <math><0.005(0.13)</math>

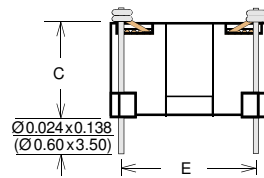
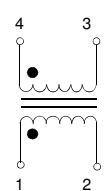
TC2, 5 & THC6



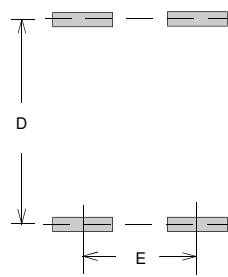
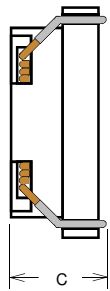
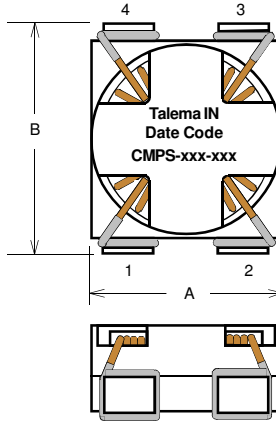
Suggested Board Layout (Top view)



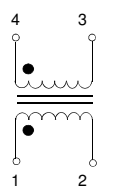
Schematic A



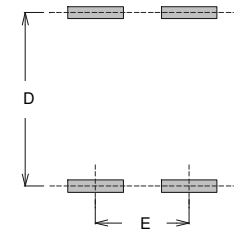
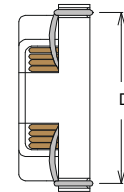
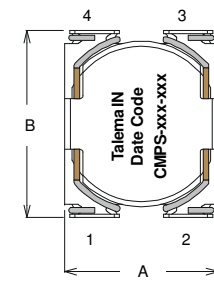
SHC6



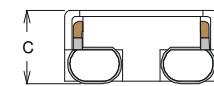
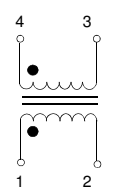
Schematic



SHC7



Schematic



| Mounting Style | Size Code | Dimensions - Inches ± 0.010 - mm (± 0.25) | | | | | | |
|----------------|-----------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| | | A | B | C | D | E | Pad Length | Pad Width |
| SMD | SC2 | 0.472 (12.00) | 0.472 (12.00) | 0.213 (5.40) | 0.410 (10.40) | 0.330 (8.38) | 4 x 0.175(4.45) | 4 x 0.060(1.52) |
| | SC5 | 0.662 (16.82) | 0.760 (19.31) | 0.390 (9.91) | 0.660 (16.76) | 0.445 (11.30) | 4 x 0.175(4.45) | 4 X 0.060(1.52) |
| | SHC6 | 1.000 (25.40) | 1.104 (28.05) | 0.394 (10.00) | 1.010 (25.65) | 0.620 (15.75) | 4 x 0.300(7.62) | 4 x 0.080 (2.03) |
| | SHC7 | 1.000 (25.40) | 1.220 (30.99) | 0.500 (12.70) | 1.100 (27.94) | 0.600 (15.24) | 4 x 0.400(10.16) | 4 x 0.155 (3.94) |
| THT | TC2 | 0.472 (12.00) | 0.472 (12.00) | 0.198 (5.02) | 0.400 (10.16) | 0.350 (8.89) | NA | NA |
| | TC5 | 0.662 (16.82) | 0.760 (19.31) | 0.362 (9.20) | 0.500 (12.70) | 0.500 (12.70) | NA | NA |
| | THC6 | 1.000 (25.40) | 1.104 (28.05) | 0.358 (9.08) | 1.000 (25.40) | 0.600 (15.24) | NA | NA |