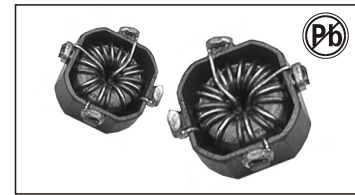


SURFACE-MOUNT TOROIDAL COILS AND COMMON MODE TOROIDAL CHORES

STC SERIES

STC-01, 02, 03, 04



FEATURES:

- Higher Frequency
- High Saturation Material
- Low EMI Radiation
- Pick and PLace
- Low DC Resistance

OPTIONS:

- Tape and Reel is Standard
- Custom Design Available
- CMC Design Available
- Tolerance:20% is Standard
- Tighter Tolerances Available

COMMON APPLICATIONS:

- Electronic Appliances
- DC – DC Conversion (Paraller Mode)
- Isolation/Coupling(Transformer)
- Input Filter(Serial Mode)
- EMI/RFI Suppression

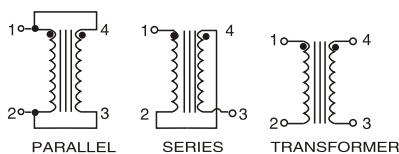
STANDARD SPECIFICATION:

| Part Number STC-XX- | Parallel Ratings 01 | | | Parallel Ratings 02 | | | Parallel Ratings 03 | | | Parallel Ratings 04 | | |
|------------------------|--|---------------|--------------------------|--|---------------|--------------------------|--|---------------|--------------------------|--|---------------|--------------------------|
| | OCL nominal +/-25% (μ H) | IDC A(max) | DCR Ω @20°C | OCL nominal +/-25% (μ H) | IDC A(max) | DCR Ω @20°C | OCL nominal +/-25% (μ H) | IDC A(max) | DCR Ω @20°C | OCL nominal +/-25% (μ H) | IDC A(max) | DCR Ω @20°C |
| 0.33 | 0.402 | 10.0 | 0.0032 | 0.284 | 10.9 | 0.0028 | 0.368 | 11.4 | 0.0027 | 0.313 | 12.2 | 0.0026 |
| 0.68 | 0.752 | 9.0 | 0.0039 | 0.675 | 9.4 | 0.0039 | 0.688 | 9.3 | 0.0041 | 0.744 | 10.6 | 0.0034 |
| 1.0 | 1.18 | 7.26 | 0.0060 | 1.26 | 8.22 | 0.0050 | 1.08 | 8.38 | 0.0051 | 1.39 | 9.23 | 0.0045 |
| 2.0 | 2.30 | 5.64 | 0.010 | 1.98 | 6.74 | 0.0077 | 2.11 | 7.26 | 0.0068 | 2.18 | 8.38 | 0.0054 |
| 5.0 | 4.70 | 4.27 | 0.017 | 5.06 | 4.34 | 0.018 | 5.20 | 5.24 | 0.013 | 4.26 | 7.21 | 0.0073 |
| 8.0 | 7.94 | 3.37 | 0.028 | 7.90 | 3.50 | 0.027 | 8.43 | 4.23 | 0.020 | 8.70 | 5.49 | 0.013 |
| 10.0 | 10.58 | 2.84 | 0.039 | 11.38 | 2.89 | 0.040 | 9.68 | 3.64 | 0.027 | 10.53 | 4.67 | 0.017 |
| 15.0 | 15.23 | 2.07 | 0.075 | 15.48 | 2.69 | 0.046 | 15.52 | 3.25 | 0.033 | 14.70 | 3.87 | 0.025 |
| 20.0 | 20.73 | 1.71 | 0.109 | 20.22 | 2.24 | 0.067 | 20.81 | 2.43 | 0.061 | 19.58 | 3.62 | 0.029 |
| 25.0 | 24.86 | 1.46 | 0.148 | 25.60 | 1.89 | 0.095 | 24.77 | 2.34 | 0.065 | 25.14 | 3.02 | 0.041 |
| 33.0 | 34.26 | 1.22 | 0.213 | 34.84 | 1.56 | 0.138 | 33.71 | 1.93 | 0.096 | 34.80 | 2.49 | 0.061 |
| 50.0 | 51.18 | 0.99 | 0.327 | 49.38 | 1.28 | 0.206 | 49.71 | 1.56 | 0.147 | 50.11 | 2.05 | 0.089 |
| 68.0 | 67.87 | 0.92 | 0.375 | 66.44 | 1.07 | 0.293 | 68.80 | 1.28 | 0.217 | 68.21 | 1.70 | 0.131 |
| 100.0 | 99.45 | 0.74 | 0.588 | 102.38 | 0.75 | 0.596 | 99.07 | 1.05 | 0.325 | 100.57 | 1.37 | 0.201 |
| 150.0 | 147.4 | 0.67 | 0.713 | 152.9 | 0.68 | 0.722 | 149.7 | 0.86 | 0.489 | 153.5 | 1.10 | 0.313 |
| 200.0 | 198.6 | 0.62 | 0.825 | 197.5 | 0.64 | 0.814 | 198.8 | 0.71 | 0.711 | 200.4 | 0.92 | 0.447 |
| 300.0 | 300.8 | 0.56 | 1.012 | 303.7 | 0.58 | 1.006 | 296.2 | 0.56 | 1.122 | 302.8 | 0.75 | 0.675 |

PHYSICAL CHARACTERISTICS

DIMENSIONS:INCHES

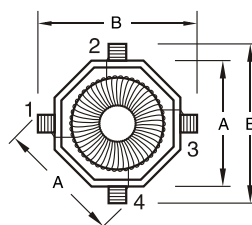
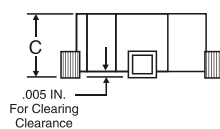
CONNECTION DIAGRAMS



| Case Size | A | B | C | D | E | F | G |
|-----------|------|------|------|------|------|------|------|
| STC-01 | .350 | .450 | .165 | .277 | .422 | .392 | .145 |
| STC-02 | .350 | .450 | .235 | .277 | .422 | .392 | .145 |
| STC-03 | .450 | .550 | .190 | .348 | .492 | .492 | .160 |
| STC-04 | .450 | .550 | .250 | .348 | .492 | .492 | .160 |

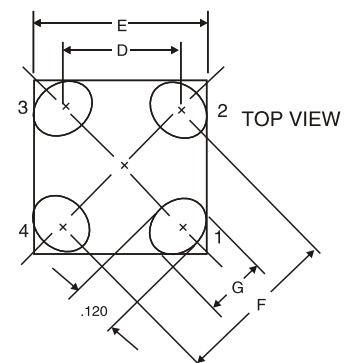
Dimensions in inches,typical

MECHANICAL DIAGRAM



BOTTOM VIEW

RECOMENDED LAYOUT



TECHNICAL INFORMATION:

- Inductance measure at 100KHz 0.1VRms.
- Insulation Resistance: 100Vdc 1KM Ω min.
- Turns Ratio: 1.1 \pm 0%
- RDC:QuadTech 1880 Milliohmmer
- Soldering temperature:260°C for 4 \pm 1 seconds
- Operating temperature:-40°C to +125°C
- Storage Temperature: -55°C to +125°C
- Different package available per special request
- Max of 35% saturation on DC bias applied

Note:All specifications subject to change without notice.