

CTSR0906F Series

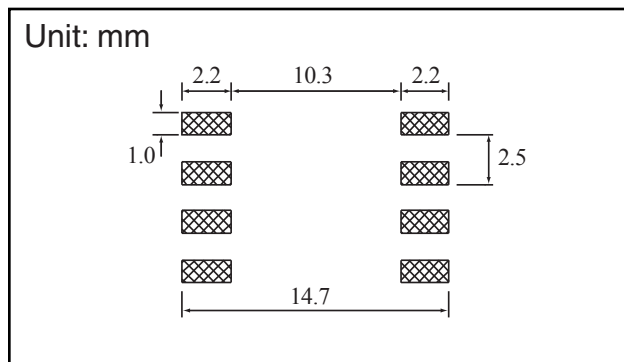
From 2.7 μH to 10,000 μH



CHARACTERISTICS

- Description:** SMD shielded power inductor.
- Applications:** Input/output of DC/DC converters, power supplies for portable communication equipment, camcorders, LCD TVs, car radios, etc.
- Operating Temperature:** -40°C to +105°C
- Temperature Rise:** 40°C Max.
- Rated Current:** Based on temp. rise & $\Delta L / L_0A = 10\%$ Max.
- Resistance to Solder Heat:** 245°C, 10 seconds.
- Inductance Tolerance:** $\pm 15\%$, $\pm 20\%$
- Testing:** Inductance is tested on an HP4284A at 1.0KHz.
- Packaging:** Tape & Reel.
- Marking:** Parts are marked with inductance code.
- Miscellaneous:** **RoHS Compliant.**
- Additional Information:** Additional electrical & physical information available upon request.
- Samples available.** See website for ordering information.

PAD LAYOUT



SPECIFICATIONS

Part numbers indicate inductance tolerance available.
L = $\pm 15\%$, M = $\pm 20\%$

| Part Number | Inductance (μH) | L Test Freq. (KHz) | Q Ref. | Q Test Freq. (_Hz) | SRF (MHz) Nom. | DCR (Ω) Max. | IDC (A) Max. |
|----------------|------------------------------|--------------------|--------|--------------------|----------------|-----------------------|--------------|
| CTSR0906F-2R7M | 2.7 | 1.0 | 23 | 7.96M | 85 | 0.032 | 3.20 |
| CTSR0906F-3R5M | 3.5 | 1.0 | 23 | 7.96M | 80 | 0.036 | 2.90 |
| CTSR0906F-4R7M | 4.7 | 1.0 | 23 | 7.96M | 70 | 0.040 | 2.70 |
| CTSR0906F-5R6M | 5.6 | 1.0 | 23 | 7.96M | 57 | 0.046 | 2.50 |
| CTSR0906F-6R8M | 6.8 | 1.0 | 23 | 7.96M | 38 | 0.050 | 2.30 |
| CTSR0906F-8R2M | 8.2 | 1.0 | 23 | 7.96M | 30 | 0.055 | 2.10 |
| CTSR0906F-100M | 10 | 1.0 | 35 | 2.52M | 29 | 0.080 | 1.80 |
| CTSR0906F-120M | 12 | 1.0 | 35 | 2.52M | 26 | 0.085 | 1.70 |
| CTSR0906F-150M | 15 | 1.0 | 35 | 2.52M | 29 | 0.100 | 1.60 |
| CTSR0906F-180M | 18 | 1.0 | 35 | 2.52M | 22 | 0.110 | 1.50 |
| CTSR0906F-220M | 22 | 1.0 | 35 | 2.52M | 19 | 0.130 | 1.40 |
| CTSR0906F-270M | 27 | 1.0 | 35 | 2.52M | 17 | 0.140 | 1.30 |
| CTSR0906F-330M | 33 | 1.0 | 35 | 2.52M | 15 | 0.150 | 1.20 |
| CTSR0906F-390M | 39 | 1.0 | 35 | 2.52M | 14 | 0.160 | 1.10 |
| CTSR0906F-470M | 47 | 1.0 | 35 | 2.52M | 12 | 0.180 | 1.00 |
| CTSR0906F-560M | 56 | 1.0 | 35 | 2.52M | 12 | 0.300 | 0.93 |
| CTSR0906F-680M | 68 | 1.0 | 40 | 2.52M | 9.0 | 0.350 | 0.85 |
| CTSR0906F-820M | 82 | 1.0 | 40 | 2.52M | 8.0 | 0.370 | 0.78 |
| CTSR0906F-101L | 100 | 1.0 | 40 | 0.796M | 7.5 | 0.420 | 0.70 |
| CTSR0906F-121L | 120 | 1.0 | 40 | 0.796M | 7.0 | 0.480 | 0.65 |
| CTSR0906F-151L | 150 | 1.0 | 40 | 0.796M | 6.0 | 0.550 | 0.60 |
| CTSR0906F-181L | 180 | 1.0 | 40 | 0.796M | 5.5 | 0.820 | 0.52 |
| CTSR0906F-221L | 220 | 1.0 | 40 | 0.796M | 5.0 | 1.00 | 0.48 |
| CTSR0906F-271L | 270 | 1.0 | 40 | 0.796M | 5.0 | 1.10 | 0.44 |
| CTSR0906F-331L | 330 | 1.0 | 40 | 0.796M | 4.5 | 1.30 | 0.40 |
| CTSR0906F-391L | 390 | 1.0 | 40 | 0.796M | 4.2 | 1.40 | 0.38 |
| CTSR0906F-471L | 470 | 1.0 | 40 | 0.796M | 4.0 | 1.60 | 0.35 |
| CTSR0906F-561L | 560 | 1.0 | 60 | 0.796M | 3.2 | 2.70 | 0.28 |
| CTSR0906F-681L | 680 | 1.0 | 60 | 0.796M | 2.7 | 3.20 | 0.25 |
| CTSR0906F-821L | 820 | 1.0 | 85 | 0.796M | 2.6 | 3.50 | 0.23 |
| CTSR0906F-102L | 1000 | 1.0 | 100 | 0.252M | 2.3 | 4.00 | 0.22 |
| CTSR0906F-122L | 1200 | 1.0 | 100 | 0.252M | 2.3 | 4.40 | 0.20 |
| CTSR0906F-152L | 1500 | 1.0 | 100 | 0.252M | 2.0 | 5.20 | 0.18 |
| CTSR0906F-182L | 1800 | 1.0 | 100 | 0.252M | 1.7 | 7.00 | 0.17 |
| CTSR0906F-222L | 2200 | 1.0 | 100 | 0.252M | 1.5 | 8.50 | 0.16 |
| CTSR0906F-272L | 2700 | 1.0 | 100 | 0.252M | 1.4 | 9.20 | 0.14 |
| CTSR0906F-332L | 3300 | 1.0 | 100 | 0.252M | 1.3 | 11.0 | 0.12 |
| CTSR0906F-392L | 3900 | 1.0 | 100 | 0.252M | 1.2 | 16.0 | 0.11 |
| CTSR0906F-472L | 4700 | 1.0 | 100 | 0.252M | 1.0 | 19.0 | 0.10 |
| CTSR0906F-562L | 5600 | 1.0 | 100 | 0.252M | 0.9 | 21.0 | 0.09 |
| CTSR0906F-682L | 6800 | 1.0 | 100 | 0.252M | 0.9 | 24.0 | 0.09 |
| CTSR0906F-822L | 8200 | 1.0 | 100 | 0.252M | 0.8 | 31.0 | 0.08 |
| CTSR0906F-103L | 10000 | 1.0 | 100 | 79.60K | 0.7 | 38.0 | 0.07 |

PHYSICAL DIMENSIONS

| Size | A | B Max. | C | D | E | F | G Typ. | H |
|--------|------------------|--------|------------------|------------------|------------------|------------------|--------|------|
| mm | 9.5 \pm 0.3 | 10.5 | 6.0 \pm 0.3 | 2.5 \pm 0.3 | 11.0 \pm 0.5 | 12.7 \pm 0.8 | 0.6 | 3.0 |
| inches | 0.37 \pm 0.012 | 0.41 | 0.24 \pm 0.012 | 0.10 \pm 0.012 | 0.43 \pm 0.020 | 0.50 \pm 0.031 | 0.024 | 0.12 |

