

## CTS1F Series

From .10 $\mu$ H to 1,000 $\mu$ H



### SPECIFICATIONS

Please specify inductance tolerance when ordering.  
CST1F-R10 ← J = ±5%, K = ±10%

| Part Number | Inductance ( $\mu$ H) | L Test Freq. (MHz) | Q Factor Min. | Q Test Freq. (MHz) | SRF Min. (MHz) | DCR Max. ( $\Omega$ ) | Rated DC (mA) |
|-------------|-----------------------|--------------------|---------------|--------------------|----------------|-----------------------|---------------|
| CTS1F-R10_  | .10                   | 25                 | 39            | 25                 | 400            | .071                  | 1580          |
| CTS1F-R12_  | .12                   | 25                 | 36            | 25                 | 400            | .087                  | 1360          |
| CTS1F-R15_  | .15                   | 25                 | 35            | 25                 | 400            | .109                  | 1280          |
| CTS1F-R18_  | .18                   | 25                 | 33            | 25                 | 400            | .145                  | 1110          |
| CTS1F-R22_  | .22                   | 25                 | 35            | 25                 | 400            | .165                  | 1040          |
| CTS1F-R27_  | .27                   | 25                 | 33            | 25                 | 400            | .192                  | 965           |
| CTS1F-R33_  | .33                   | 25                 | 33            | 25                 | 370            | .228                  | 885           |
| CTS1F-R39_  | .39                   | 25                 | 32            | 25                 | 348            | .259                  | 830           |
| CTS1F-R47_  | .47                   | 25                 | 33            | 25                 | 312            | .348                  | 717           |
| CTS1F-R56_  | .56                   | 25                 | 30            | 25                 | 286            | .417                  | 655           |
| CTS1F-R68_  | .68                   | 25                 | 30            | 25                 | 262            | .580                  | 555           |
| CTS1F-R82_  | .82                   | 25                 | 33            | 25                 | 188            | .132                  | 1160          |
| CTS1F-1R0_  | 1.0                   | 25                 | 35            | 25                 | 166            | .169                  | 1030          |
| CTS1F-1R2_  | 1.2                   | 7.9                | 29            | 7.9                | 149            | .184                  | 985           |
| CTS1F-1R5_  | 1.5                   | 7.9                | 29            | 7.9                | 136            | .26                   | 825           |
| CTS1F-1R8_  | 1.8                   | 7.9                | 29            | 7.9                | 118            | .36                   | 705           |
| CTS1F-2R2_  | 2.2                   | 7.9                | 28            | 7.9                | 110            | .41                   | 665           |
| CTS1F-2R7_  | 2.7                   | 7.9                | 32            | 7.9                | 94             | .55                   | 577           |
| CTS1F-3R3_  | 3.3                   | 7.9                | 32            | 7.9                | 86             | .62                   | 540           |
| CTS1F-3R9_  | 3.9                   | 7.9                | 38            | 7.9                | 85             | .79                   | 475           |
| CTS1F-4R7_  | 4.7                   | 7.9                | 38            | 7.9                | 79             | .91                   | 445           |
| CTS1F-5R6_  | 5.6                   | 7.9                | 40            | 7.9                | 72             | 1.15                  | 395           |
| CTS1F-6R8_  | 6.8                   | 7.9                | 46            | 7.9                | 65             | 1.73                  | 320           |
| CTS1F-8R2_  | 8.2                   | 7.9                | 45            | 7.9                | 59             | 1.96                  | 302           |
| CTS1F-100_  | 10                    | 7.9                | 45            | 7.9                | 53             | 2.3                   | 280           |
| CTS1F-120_  | 12                    | 2.5                | 40            | 2.5                | 60             | .55                   | 570           |
| CTS1F-150_  | 15                    | 2.5                | 45            | 2.5                | 53             | .71                   | 500           |
| CTS1F-180_  | 18                    | 2.5                | 45            | 2.5                | 45.8           | 1.0                   | 423           |
| CTS1F-220_  | 22                    | 2.5                | 45            | 2.5                | 42.2           | 1.09                  | 404           |
| CTS1F-270_  | 27                    | 2.5                | 48            | 2.5                | 31.0           | 1.35                  | 364           |
| CTS1F-330_  | 33                    | 2.5                | 54            | 2.5                | 26.0           | 1.9                   | 305           |
| CTS1F-390_  | 39                    | 2.5                | 54            | 2.5                | 24.2           | 2.1                   | 293           |
| CTS1F-470_  | 47                    | 2.5                | 54            | 2.5                | 22.0           | 2.4                   | 271           |
| CTS1F-560_  | 56                    | 2.5                | 60            | 2.5                | 21.2           | 2.9                   | 248           |
| CTS1F-680_  | 68                    | 2.5                | 55            | 2.5                | 19.9           | 3.2                   | 237           |
| CTS1F-820_  | 82                    | 2.5                | 57            | 2.5                | 16.8           | 3.7                   | 219           |
| CTS1F-101_  | 100                   | 2.5                | 60            | 2.5                | 13.2           | 4.6                   | 198           |
| CTS1F-121_  | 120                   | .79                | 58            | .79                | 11.0           | 5.2                   | 184           |
| CTS1F-151_  | 150                   | .79                | 60            | .79                | 9.1            | 5.9                   | 173           |
| CTS1F-181_  | 180                   | .79                | 60            | .79                | 7.4            | 7.4                   | 156           |
| CTS1F-221_  | 220                   | .79                | 60            | .79                | 7.2            | 8.5                   | 145           |
| CTS1F-271_  | 270                   | .79                | 60            | .79                | 6.8            | 10.0                  | 133           |
| CTS1F-331_  | 330                   | .79                | 60            | .79                | 5.5            | 13.4                  | 115           |
| CTS1F-391_  | 390                   | .79                | 60            | .79                | 5.1            | 15.0                  | 109           |
| CTS1F-471_  | 470                   | .79                | 60            | .79                | 5.0            | 21.0                  | 92            |
| CTS1F-561_  | 560                   | .79                | 60            | .79                | 4.9            | 23.0                  | 88            |
| CTS1F-681_  | 680                   | .79                | 60            | .79                | 4.6            | 26.0                  | 82            |
| CTS1F-821_  | 820                   | .79                | 60            | .79                | 4.2            | 34.0                  | 72            |
| CTS1F-102_  | 1000                  | .79                | 60            | .79                | 4.0            | 39.0                  | 67            |

### CHARACTERISTICS

**Description:** Axial leaded molded (shielded) inductor

**Applications:** Used for high reliability applications. Vital for telecommunication applications. Ideal for various RF applications

**Operating Temperature:** -55°C to +105°C

**Inductance Tolerance:** ±5% & ±10%

**Testing:** Inductance and Q are tested on a HP4285A at specified frequency

**Packaging:** Bulk pack, 1,000 parts per bag, Tape & Reel, 5,000 parts per reel

**Marking:** Parts are EIA color banded, which indicates inductance code and tolerance

**Material:** Molded epoxy resin over the magnetic core for superior shielding and reliability

**Miscellaneous:** RoHS Compliant. Other values available

**Additional Information:** Additional electrical & physical information available upon request

**Samples available. See website for ordering information.**

### PHYSICAL DIMENSIONS

| Size   | A          | B           | C<br>Typ. | 24 AWG  |
|--------|------------|-------------|-----------|---------|
| mm     | 6.60±0.25  | 2.80±0.25   | 29.2      | 0.5110  |
| inches | 0.26±0.010 | 0.110±0.010 | 1.15      | 0.02010 |

