

## CTC2F

## Series

From 0.022  $\mu\text{H}$  to 1,000  $\mu\text{H}$

ENGINEERING KIT #1F



### CHARACTERISTICS

**Description:** Axial leaded conformal coated inductor.

**Applications:** Used in less harsh environments. Ideal for less critical RFL/EMI applications.

**Operating Temperature:** -55°C to +125°C

**Inductance Tolerance:**  $\pm 5\%$ ,  $\pm 10\%$ ,  $\pm 20\%$

**Testing:** Inductance and Q are tested on an HP4285A or HP4286A at specified frequency.

**Packaging:** Bulk pack or Tape & Reel, 5,000 parts per reel.

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

**Material:** Magnetic core with epoxy resin for protection and longer reliability.

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

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

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

### SPECIFICATIONS

Please specify inductance tolerance when ordering.

CTC2F-R022\_ ← J =  $\pm 5\%$ , K =  $\pm 10\%$ , M =  $\pm 20\%$

| Part Number | Inductance ( $\mu\text{H}$ ) | L Test Freq. (MHz) | Q Factor Min. | Q Test Freq. (MHz) | SRF Min. (MHz) | DCR Max. ( $\Omega$ ) | Rated DC (mA) |
|-------------|------------------------------|--------------------|---------------|--------------------|----------------|-----------------------|---------------|
| CTC2F-R022_ | .022                         | 50                 | 40            | 50                 | 500            | .01                   | 520           |
| CTC2F-R033_ | .033                         | 50                 | 40            | 50                 | 490            | .02                   | 500           |
| CTC2F-R039_ | .039                         | 50                 | 40            | 50                 | 480            | .02                   | 500           |
| CTC2F-R047_ | .047                         | 50                 | 40            | 50                 | 480            | .03                   | 500           |
| CTC2F-R056_ | .056                         | 50                 | 40            | 50                 | 470            | .04                   | 460           |
| CTC2F-R068_ | .068                         | 50                 | 40            | 50                 | 470            | .05                   | 460           |
| CTC2F-R082_ | .082                         | 50                 | 40            | 50                 | 470            | .05                   | 460           |
| CTC2F-R10_  | .10                          | 25.2               | 30            | 25.2               | 280            | .08                   | 1400          |
| CTC2F-R12_  | .12                          | 25.2               | 30            | 25.2               | 280            | .08                   | 1350          |
| CTC2F-R15_  | .15                          | 25.2               | 30            | 25.2               | 280            | .09                   | 1270          |
| CTC2F-R18_  | .18                          | 25.2               | 30            | 25.2               | 280            | .12                   | 1200          |
| CTC2F-R22_  | .22                          | 25.2               | 40            | 25.2               | 280            | .15                   | 1150          |
| CTC2F-R27_  | .27                          | 25.2               | 40            | 25.2               | 260            | .15                   | 1110          |
| CTC2F-R33_  | .33                          | 25.2               | 40            | 25.2               | 250            | .15                   | 1110          |
| CTC2F-R39_  | .39                          | 25.2               | 40            | 25.2               | 220            | .17                   | 1000          |
| CTC2F-R47_  | .47                          | 25.2               | 40            | 25.2               | 200            | .17                   | 1000          |
| CTC2F-R56_  | .56                          | 25.2               | 40            | 25.2               | 180            | .17                   | 950           |
| CTC2F-R68_  | .68                          | 25.2               | 40            | 25.2               | 160            | .18                   | 900           |
| CTC2F-R82_  | .82                          | 25.2               | 40            | 25.2               | 140            | .18                   | 900           |
| CTC2F-1R0_  | 1.0                          | 25.2               | 40            | 25.2               | 135            | .18                   | 815           |
| CTC2F-1R2_  | 1.2                          | 7.96               | 40            | 7.96               | 135            | .18                   | 740           |
| CTC2F-1R5_  | 1.5                          | 7.96               | 45            | 7.96               | 130            | .20                   | 700           |
| CTC2F-1R8_  | 1.8                          | 7.96               | 40            | 7.96               | 125            | .23                   | 655           |
| CTC2F-2R2_  | 2.2                          | 7.96               | 40            | 7.96               | 80             | .25                   | 630           |
| CTC2F-2R7_  | 2.7                          | 7.96               | 40            | 7.96               | 80             | .28                   | 596           |
| CTC2F-3R3_  | 3.3                          | 7.96               | 40            | 7.96               | 70             | .30                   | 575           |
| CTC2F-3R9_  | 3.9                          | 7.96               | 40            | 7.96               | 65             | .32                   | 555           |
| CTC2F-4R7_  | 4.7                          | 7.96               | 40            | 7.96               | 45             | .35                   | 530           |
| CTC2F-5R6_  | 5.6                          | 7.96               | 40            | 7.96               | 49             | .40                   | 500           |
| CTC2F-6R8_  | 6.8                          | 7.96               | 40            | 7.96               | 30             | .45                   | 470           |
| CTC2F-8R2_  | 8.2                          | 7.96               | 40            | 7.96               | 28             | .56                   | 425           |
| CTC2F-100_  | 10                           | 7.96               | 40            | 7.96               | 22             | .72                   | 370           |
| CTC2F-120_  | 12                           | 2.52               | 40            | 2.52               | 20             | .80                   | 350           |
| CTC2F-150_  | 15                           | 2.52               | 40            | 2.52               | 16             | .88                   | 335           |
| CTC2F-180_  | 18                           | 2.52               | 40            | 2.52               | 15             | 1.0                   | 315           |
| CTC2F-220_  | 22                           | 2.52               | 40            | 2.52               | 13             | 1.2                   | 285           |
| CTC2F-270_  | 27                           | 2.52               | 40            | 2.52               | 11             | 1.3                   | 270           |
| CTC2F-330_  | 33                           | 2.52               | 40            | 2.52               | 10             | 1.5                   | 255           |
| CTC2F-390_  | 39                           | 2.52               | 40            | 2.52               | 9.5            | 1.7                   | 240           |
| CTC2F-470_  | 47                           | 2.52               | 50            | 2.52               | 8.5            | 2.3                   | 205           |
| CTC2F-560_  | 56                           | 2.52               | 50            | 2.52               | 7.5            | 2.6                   | 195           |
| CTC2F-680_  | 68                           | 2.52               | 50            | 2.52               | 6.5            | 2.9                   | 185           |
| CTC2F-820_  | 82                           | 2.52               | 50            | 2.52               | 6.0            | 3.2                   | 175           |
| CTC2F-101_  | 100                          | 2.52               | 50            | 2.52               | 5.5            | 3.5                   | 165           |
| CTC2F-121_  | 120                          | .796               | 60            | .796               | 5.4            | 3.8                   | 160           |
| CTC2F-151_  | 150                          | .796               | 60            | .796               | 4.8            | 4.4                   | 150           |
| CTC2F-181_  | 180                          | .796               | 60            | .796               | 4.4            | 5.0                   | 140           |
| CTC2F-221_  | 220                          | .796               | 60            | .796               | 4.0            | 5.7                   | 130           |
| CTC2F-271_  | 270                          | .796               | 60            | .796               | 3.7            | 7.5                   | 120           |
| CTC2F-331_  | 330                          | .796               | 60            | .796               | 3.4            | 9.5                   | 100           |
| CTC2F-391_  | 390                          | .796               | 60            | .796               | 2.8            | 10                    | 95            |
| CTC2F-471_  | 470                          | .796               | 60            | .796               | 2.7            | 11                    | 90            |
| CTC2F-561_  | 560                          | .796               | 60            | .796               | 2.4            | 13                    | 85            |
| CTC2F-681_  | 680                          | .796               | 60            | .796               | 2.0            | 18                    | 75            |
| CTC2F-821_  | 820                          | .796               | 60            | .796               | 1.6            | 24                    | 65            |
| CTC2F-102_  | 1000                         | .796               | 50            | .796               | 1.2            | 30                    | 60            |

### PHYSICAL DIMENSIONS

| Size   | A Max. | B Max. | C Typ. | 24 AWG Nom. |
|--------|--------|--------|--------|-------------|
| mm     | 7.0    | 3.0    | 29.2   | 0.511       |
| inches | 0.28   | 0.12   | 1.15   | 0.02        |

