

# CTDS1608F

## Series

From 1.0 $\mu$ H to 10,000 $\mu$ H



### CHARACTERISTICS

**Description:** SMD (shielded) power inductor

**Applications:** DC/DC converters, computers, LCD displays and telecommunication equipment. Can help achieve significantly longer battery life in hand held communication devices and other portable products

**Operating Temperature:** -40°C to +85°C

**Inductance Tolerance:**  $\pm 20\%$

**Testing:** Inductance and Q are tested on an HP4285A at 100kHz

**Packaging:** Tape & Reel

**Marking:** Inductance code or letter identifier

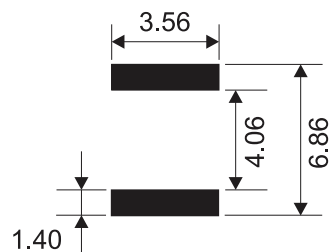
**Miscellaneous:** **RoHS Compliant.** Magnetically shielded

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

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

### PAD LAYOUT

Unit: mm



### SPECIFICATIONS

Parts are available in  $\pm 20\%$  inductance tolerance only.

| Part Number    | Inductance ( $\mu$ H $\pm 20\%$ ) | L Test Freq. (kHz) | Q Fact. Min. | Q Test Freq. (kHz) | DCR Max. ( $\Omega$ ) | IDC Max. (A) | SRF Typ. (MHz) |
|----------------|-----------------------------------|--------------------|--------------|--------------------|-----------------------|--------------|----------------|
| CTDS1608CF-102 | 1.0                               | 100                | 30           | 200                | .040                  | 3.0          | 250            |
| CTDS1608CF-152 | 1.5                               | 100                | 30           | 200                | .045                  | 2.8          | 125            |
| CTDS1608CF-222 | 2.2                               | 100                | 40           | 200                | .050                  | 1.8          | 120            |
| CTDS1608CF-332 | 3.3                               | 100                | 40           | 200                | .055                  | 1.6          | 120            |
| CTDS1608CF-472 | 4.7                               | 100                | 40           | 200                | .060                  | 1.4          | 105            |
| CTDS1608CF-682 | 6.8                               | 100                | 40           | 200                | .065                  | 1.2          | 50             |
| CTDS1608CF-103 | 10                                | 100                | 40           | 200                | .075                  | 1.0          | 38             |
| CTDS1608CF-153 | 15                                | 100                | 40           | 100                | .090                  | 0.8          | 33             |
| CTDS1608CF-223 | 22                                | 100                | 40           | 100                | .110                  | 0.7          | 25             |
| CTDS1608CF-333 | 33                                | 100                | 40           | 100                | .190                  | 0.6          | 20             |
| CTDS1608CF-473 | 47                                | 100                | 40           | 100                | .230                  | 0.5          | 20             |
| CTDS1608CF-683 | 68                                | 100                | 40           | 100                | .290                  | 0.4          | 15             |
| CTDS1608CF-104 | 100                               | 100                | 40           | 100                | .480                  | 0.3          | 10             |
| CTDS1608CF-154 | 150                               | 100                | 40           | 100                | .590                  | .26          | 9              |
| CTDS1608CF-224 | 220                               | 100                | 40           | 100                | .770                  | .22          | 6              |
| CTDS1608CF-334 | 330                               | 100                | 40           | 100                | 1.4                   | .20          | 5              |
| CTDS1608CF-474 | 470                               | 100                | 40           | 100                | 1.8                   | .19          | 4              |
| CTDS1608CF-684 | 680                               | 100                | 40           | 100                | 2.2                   | .18          | 3              |
| CTDS1608CF-105 | 1000                              | 100                | 40           | 100                | 3.4                   | .15          | 2              |
| CTDS1608CF-155 | 1500                              | 100                | 50           | 100                | 4.2                   | .12          | 2              |
| CTDS1608CF-225 | 2200                              | 100                | 50           | 100                | 8.5                   | .10          | 2              |
| CTDS1608CF-335 | 3300                              | 100                | 50           | 100                | 11.0                  | .08          | 1              |
| CTDS1608CF-475 | 4700                              | 100                | 50           | 100                | 13.9                  | .06          | 1              |
| CTDS1608CF-685 | 6800                              | 100                | 50           | 100                | 25.0                  | .04          | 1              |
| CTDS1608CF-825 | 8200                              | 100                | 50           | 100                | 30.5                  | .02          | 1              |
| CTDS1608CF-106 | 10000                             | 100                | 50           | 100                | 32.8                  | .02          | 0.8            |

### PHYSICAL DIMENSIONS

| Size   | A    | B    | C    | D    | E    | F    | G    |
|--------|------|------|------|------|------|------|------|
|        | Max. | Max. | Max. |      |      |      |      |
| mm     | 6.6  | 4.45 | 2.92 | 1.02 | 1.27 | 4.32 | 3.05 |
| inches | 0.26 | 0.18 | 0.12 | 0.04 | 0.05 | 0.17 | 0.1  |

Parts will be marked with Inductance code or letter identifier

