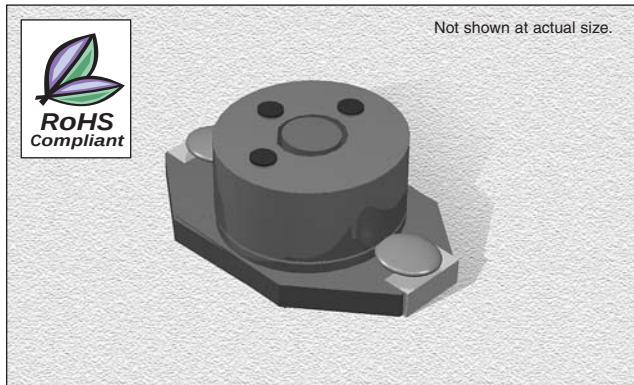


# CTDT3316F Series

From 1.0  $\mu\text{H}$  to 1,000  $\mu\text{H}$



## CHARACTERISTICS

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

**Applications:** Ideal for high performance DC/DC converter applications, computers, LCD displays and telecommunication equipment. Especially those requiring shielding

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

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

**Testing:** Inductance is tested on an HP4285A at 100 kHz

**Packaging:** Tape & Reel

**Marking:** Color dots OR Suffix Code

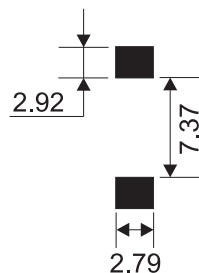
**Miscellaneous:** **RoHS Compliant.** Magnetically shielded

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

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

## PAD LAYOUT

Unit: mm



## SPECIFICATIONS

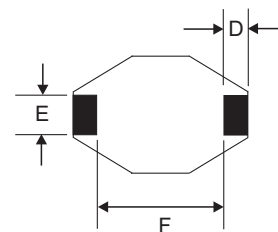
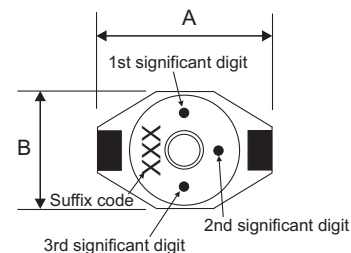
Parts are available in  $\pm 20\%$  tolerance only.

| SPECIFICATIONS |                                             |                       | SPECIFICATIONS |                                     |                    |                    |                                            |                   |
|----------------|---------------------------------------------|-----------------------|----------------|-------------------------------------|--------------------|--------------------|--------------------------------------------|-------------------|
| Part Number    | 0 ADC Inductance ( $\mu\text{H} \pm 20\%$ ) | DCR Max. ( $\Omega$ ) | SRF Typ. (MHz) | Inductance Rating ( $\mu\text{H}$ ) | L Test Freq. (kHz) | Current Rating (A) | Max. Energy Storage ( $\mu\text{Joules}$ ) | Max. Switch Freq. |
| CTDT3316PF-102 | 1.0                                         | .025                  | 60             | .50                                 | 100                | 5.0                | 9.0                                        | 1 MHz             |
| CTDT3316PF-152 | 1.5                                         | .030                  | 55             | .70                                 | 100                | 5.0                | 12                                         | 1 MHz             |
| CTDT3316PF-222 | 2.2                                         | .035                  | 55             | 1.0                                 | 100                | 5.0                | 15                                         | 1 MHz             |
| CTDT3316PF-332 | 3.3                                         | .040                  | 50             | 1.5                                 | 100                | 5.0                | 16                                         | 1 MHz             |
| CTDT3316PF-472 | 4.7                                         | .045                  | 45             | 2.0                                 | 100                | 3.0                | 10                                         | 1 MHz             |
| CTDT3316PF-682 | 6.8                                         | .050                  | 40             | 4.0                                 | 100                | 2.5                | 14                                         | 1 MHz             |
| CTDT3316PF-103 | 10                                          | .055                  | 35             | 5.0                                 | 100                | 2.0                | 11                                         | 1 MHz             |
| CTDT3316PF-153 | 15                                          | .060                  | 25             | 6.0                                 | 100                | 1.8                | 12                                         | 1 MHz             |
| CTDT3316PF-223 | 22                                          | .084                  | 22             | 10                                  | 100                | 1.5                | 11                                         | 1 MHz             |
| CTDT3316PF-333 | 33                                          | .090                  | 18             | 12                                  | 100                | 1.3                | 13                                         | 1 MHz             |
| CTDT3316PF-473 | 47                                          | .110                  | 16             | 27                                  | 100                | 1.0                | 13                                         | 1 MHz             |
| CTDT3316PF-683 | 68                                          | .150                  | 12             | 40                                  | 100                | .90                | 17                                         | 1 MHz             |
| CTDT3316PF-104 | 100                                         | .290                  | 9              | 50                                  | 100                | .80                | 15                                         | 1 MHz             |
| CTDT3316PF-154 | 150                                         | .360                  | 8              | 80                                  | 100                | .60                | 15                                         | 500 kHz           |
| CTDT3316PF-224 | 220                                         | .390                  | 6              | 90                                  | 100                | .50                | 10                                         | 500 kHz           |
| CTDT3316PF-334 | 330                                         | .730                  | 5              | 150                                 | 100                | .40                | 13                                         | 500 kHz           |
| CTDT3316PF-474 | 470                                         | .880                  | 4              | 200                                 | 100                | .35                | 13                                         | 500 kHz           |
| CTDT3316PF-684 | 680                                         | 1.15                  | 3              | 300                                 | 100                | .30                | 13                                         | 500 kHz           |
| CTDT3316PF-105 | 1000                                        | 1.45                  | 2.5            | 420                                 | 100                | .25                | 13                                         | 500 kHz           |

## PHYSICAL DIMENSIONS

| Size   | A<br>Max. | B<br>Max. | C<br>Max. | D    | E    | F    |
|--------|-----------|-----------|-----------|------|------|------|
| mm     | 12.95     | 9.4       | 5.08      | 2.54 | 2.54 | 7.62 |
| inches | 0.51      | 0.37      | 0.2       | 0.1  | 0.1  | 0.3  |

Parts will be marked with  
Significant Digit Dots or Suffix Code



01.12.10