CTMMP3116F Series

From $0.22\mu\text{H}$ to $33\mu\text{H}$



CHARACTERISTICS

Description: SMD (shielded) power inductor **Applications:** High density DC/DC converters. POL

converters. High current VRM/VRD for notebooks, servers, and

desktop CPUs. High speed chargers.

Operating Temperature: -40°C to +125°C [The part temperature (ambient + temp. rise)] should not exceed 125°C under worst case operating conditions. Component placement, PWB trace, size, thickness and other cooling provisions will affect the part temperature. Part temperature should be verified in the end application.

Inductance Tolerance: $N = \pm 30\%$, $M = \pm 20\%$ Testing: Inducance is measured at 200kHz, 0.25V

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.

SPECIFICATIONS

Parts numbers indicate available inductance tolerance.

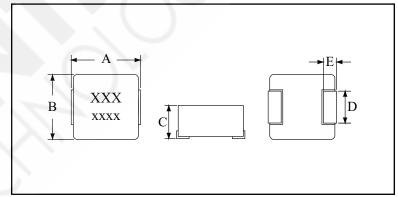
N = ±30%, M = ±20%

*Irms DC current (A) will cause an approximately ΔT of 40°C
**Isat DC current (A) will cause L0 to drop approximately 30%

| Part Number | Inductance (µH) | L Test Freq. (KHz) | *Irms Typ. (A) | **Isat Typ. (A) | DCR Max. (mΩ) | DCR Typ. (mΩ) |
|-----------------|--------------------|--------------------------|----------------------|-----------------------|---------------------|---------------------|
| CTMMP3116F-R22N | 0.22 | 100 | 30.7 | 45.0 | 1.70 | 1.57 |
| CTMMP3116F-R47N | 0.47 | 100 | 25.0 | 31.5 | 2.62 | 2.45 |
| CTMMP3116F-1R0M | 1.00 | 100 | 18.0 | 24.0 | 5.78 | 5.40 |
| CTMMP3116F-2R2M | 2.20 | 100 | 10.5 | 23.0 | 13.7 | 12.0 |
| CTMMP3116F-3R3M | 3.30 | 100 | 9.20 | 20.0 | 17.7 | 15.5 |
| CTMMP3116F-4R7M | 4.70 | 100 | 7.25 | 15.0 | 32.0 | 28.0 |
| CTMMP3116F-6R8M | 6.80 | 100 | 6.70 | 7.00 | 33.4 | 30.0 |
| CTMMP3116F-100M | 10.0 | 100 | 5.20 | 9.00 | 59.9 | 51.0 |
| CTMMP3116F-220M | 22.0 | 100 | 3.70 | 3.80 | 110.2 | 104.0 |
| CTMMP3116F-330M | 33.0 | 100 | 3.10 | 3.20 | 159.4 | 142.0 |

PHYSICAL DIMENSIONS

| Size | A Max. | B Max. | C Max. | D | E |
|--------|-----------|-----------|-----------|-------------|-------------|
| mm | 8.9 | 8.3 | 4.0 | 3.0±0.5 | 1.9±0.3 |
| inches | 0.350 | 0.327 | 0.157 | 0.118±0.020 | 0.075±0.012 |



PAD LAYOUT

