

CTTV4724F

Series

From 70nH to 200nH



CHARACTERISTICS

Description: SMD Trans-inductor Voltage Regulator Inductors

Applications: Data centers, Graphic Cards, CPU

Operating Temperature: -40°C to +125°C (including self-temperature rise)

Inductance Test Frequency: 100kHz/1.0V

Irms(A): Heat rated current will cause the coil temperature rise approx. ΔT of 40°C.

Isat 1(A): Saturation current will cause inductance L0 to drop approx. 20% at +25°C.

Isat 2(A): Saturation current will cause inductance L0 to drop approx. 20% at +100°C.

Rated Current: The lower value of Isat and Irms.

Storage Condition (Component in its packaging)

- Temperature: -10°C to +40°C
- Humidity: Less than 70% RH

Miscellaneous:

- All test data referenced to 25°C ambient
- RoHS Compliant

Samples available. See website for ordering information.

SPECIFICATIONS

| Part Number | Inductance (nH) @0A ±15% | DCR (mΩ) | | Irms (A) Typ. | Isat 1 (A) Typ. | Isat 2 (A) Typ. | Leakage Inductance (nH) Typ. | Coupling Coefficient Typ. | Dimension B (mm) Max. | Marking |
|-----------------|-----------------------------|-------------|-------------|------------------|--------------------|--------------------|---------------------------------|------------------------------|--------------------------|---------|
| | | 1-4 ±10% | 2-3 Max. | | | | | | | |
| CTTV4724F-R07L | 70 | 0.125 | 0.450 | 70 | 160 | 140 | 17 | 0.90 | 6.2 | 70N |
| CTTV4724F-R10L | 100 | 0.125 | 0.450 | 70 | 125 | 105 | 17 | 0.91 | 6.2 | R10 |
| CTTV4724F-R105L | 105 | 0.125 | 0.450 | 70 | 120 | 100 | 17 | 0.91 | 6.0 | R105 |
| CTTV4724F-R12L | 120 | 0.125 | 0.450 | 70 | 100 | 90 | 17 | 0.92 | 6.0 | R12 |
| CTTV4724F-R15L | 150 | 0.125 | 0.450 | 70 | 80 | 70 | 17 | 0.93 | 6.0 | R15 |
| CTTV4724F-R17L | 170 | 0.125 | 0.450 | 70 | 70 | 55 | 17 | 0.94 | 6.0 | R17 |
| CTTV4724F-R20L | 200 | 0.125 | 0.450 | 70 | 50 | 40 | 17 | 0.95 | 6.0 | R20 |

PHYSICAL DIMENSIONS

Top View

Bottom View

Front View

Side View

Recommended PCB Layout

Notes:

1. Marking: Inductance (Please refer to Electrical Specifications table)
2. Dimension B please refer to Electrical Specifications table.

| Size | A | C | D1 | D2 | D3 | E | F |
|--------|------------|------------|-------------|-------------|-------------|-------------|-------------|
| mm | 12.00 Max. | 12.00 Max. | 2.40±0.20 | 3.10±0.20 | 1.05±0.20 | 1.40±0.20 | 5.30±0.20 |
| inches | 0.472 Max. | 0.472 Max. | 0.094±0.008 | 0.122±0.008 | 0.041±0.008 | 0.055±0.008 | 0.209±0.008 |