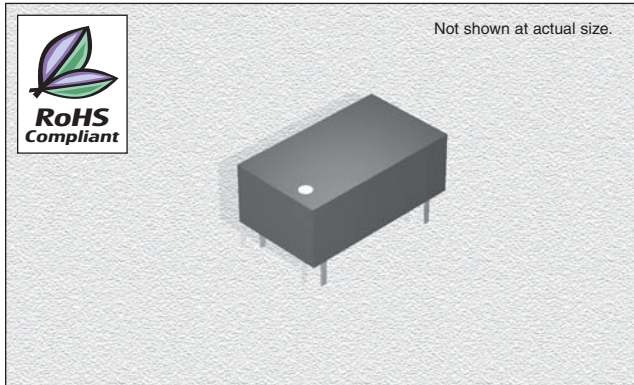


CTDD2010DF-T1K-1 Series

Fixed Input Isolated & Unregulated
1W Output, Twin Independent Output



FEATURES

- Efficiency:** To 81%
- Temperature Range:** -40°C to +85°C
- Isolation:** 1KVDC
- Package:** UL94-V0
- Miscellaneous:** No heat sink required. No external components required. Industry standard pinout. Optimized Volume. Twin Output Voltage. Miniature DIP package. Custom service available.
- Samples available.**

CHARACTERISTICS

- Short Circuit Protection:** 1 second
- Temperature Rise at Full Load:** 25°C Max. 15°C Typ.
- Cooling:** Free air convection
- No Load Power Consumption:** 10% nominal power (typical)
- Operating Temperature Range:** -40°C to +85°C
- Storage Temperature Range:** -55°C to +125°C
- Lead Temperature:** 300°C (1.5mm from case for 10 seconds)
- Storage Humidity Range:** ≤ 95%
- Case Material:** Plastic (UL94-V0)
- MTBF:** >3,500,000 hours
- Miscellaneous:** RoHS Compliant.

SPECIFICATIONS

| Part Number | Vin Nom. (VDC) | Input Range (VDC) | Vo1,Vo2 (VDC) | Io1,Io2 Max. (mA) | Io1,Io2 Min. (mA) | Effi. Typ. (%) |
|-------------------------|----------------|-------------------|---------------|-------------------|-------------------|----------------|
| CTDD2010DF-050505-T1K-1 | 5 | 4.5-5.5 | 5 | 100 | 10 | 72 |
| CTDD2010DF-050909-T1K-1 | 5 | 4.5-5.5 | 9 | 56 | 6 | 75 |
| CTDD2010DF-051212-T1K-1 | 5 | 4.5-5.5 | 12 | 42 | 4 | 78 |
| CTDD2010DF-051515-T1K-1 | 5 | 4.5-5.5 | 15 | 33 | 3 | 79 |
| CTDD2010DF-120505-T1K-1 | 12 | 10.8-13.2 | 5 | 100 | 10 | 74 |
| CTDD2010DF-120909-T1K-1 | 12 | 10.8-13.2 | 9 | 56 | 6 | 76 |
| CTDD2010DF-121212-T1K-1 | 12 | 10.8-13.2 | 12 | 42 | 4 | 79 |
| CTDD2010DF-121515-T1K-1 | 12 | 10.8-13.2 | 15 | 33 | 3 | 80 |
| CTDD2010DF-240505-T1K-1 | 24 | 21.6-26.4 | 5 | 100 | 10 | 74 |
| CTDD2010DF-240909-T1K-1 | 24 | 21.6-26.4 | 9 | 56 | 6 | 76 |
| CTDD2010DF-241212-T1K-1 | 24 | 21.6-26.4 | 12 | 42 | 4 | 80 |
| CTDD2010DF-241515-T1K-1 | 24 | 21.6-26.4 | 15 | 33 | 3 | 81 |
| CTDD2010DF-222205-T1K-1 | 22 | 19.8-24.2 | 5 | 100 | 10 | 72 |

ISOLATION SPECIFICATIONS

| Item | Test Condition | MIN | TYP | MAX | Units |
|--------------------------------|---------------------|------|-----|-----|-------|
| Isolation Voltage | Tested for 1 minute | 1000 | | | VDC |
| Isolation Resistance(Vin/Vout) | Test at 500VDC | 1000 | | | MΩ |
| Isolation Resistance(Vo1/Vo2) | Test at 500VDC | 1000 | | | MΩ |

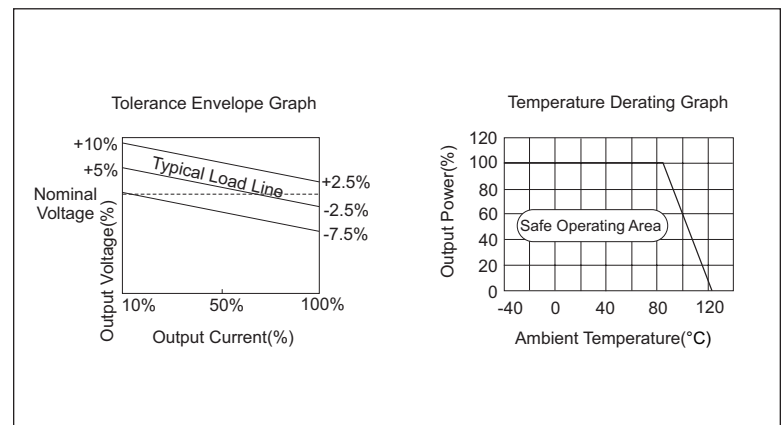
OUTPUT SPECIFICATIONS

| Item | Test Condition | MIN | TYP | MAX | Units |
|-------------------------|--------------------------|------------------------------|-----|------|-------|
| Output Power | | 0.1 | | 1 | W |
| Line regulation | For Vin change of 1% | | | 1.2 | % |
| Load regulation | 10% to 100% full load | | | 15 | % |
| Output voltage accuracy | | See tolerance envelope graph | | | |
| Temperature drift | 100% full load | | | 0.03 | %/°C |
| Output ripple | 20MHz Bandwidth | | 50 | 75 | mVp-p |
| Switching frequency | Full load, nominal input | | 100 | | KHz |

Note:

1. All specifications measured at TA=25°C, humidity<75%, nominal input voltage and rated output unless otherwise specified.

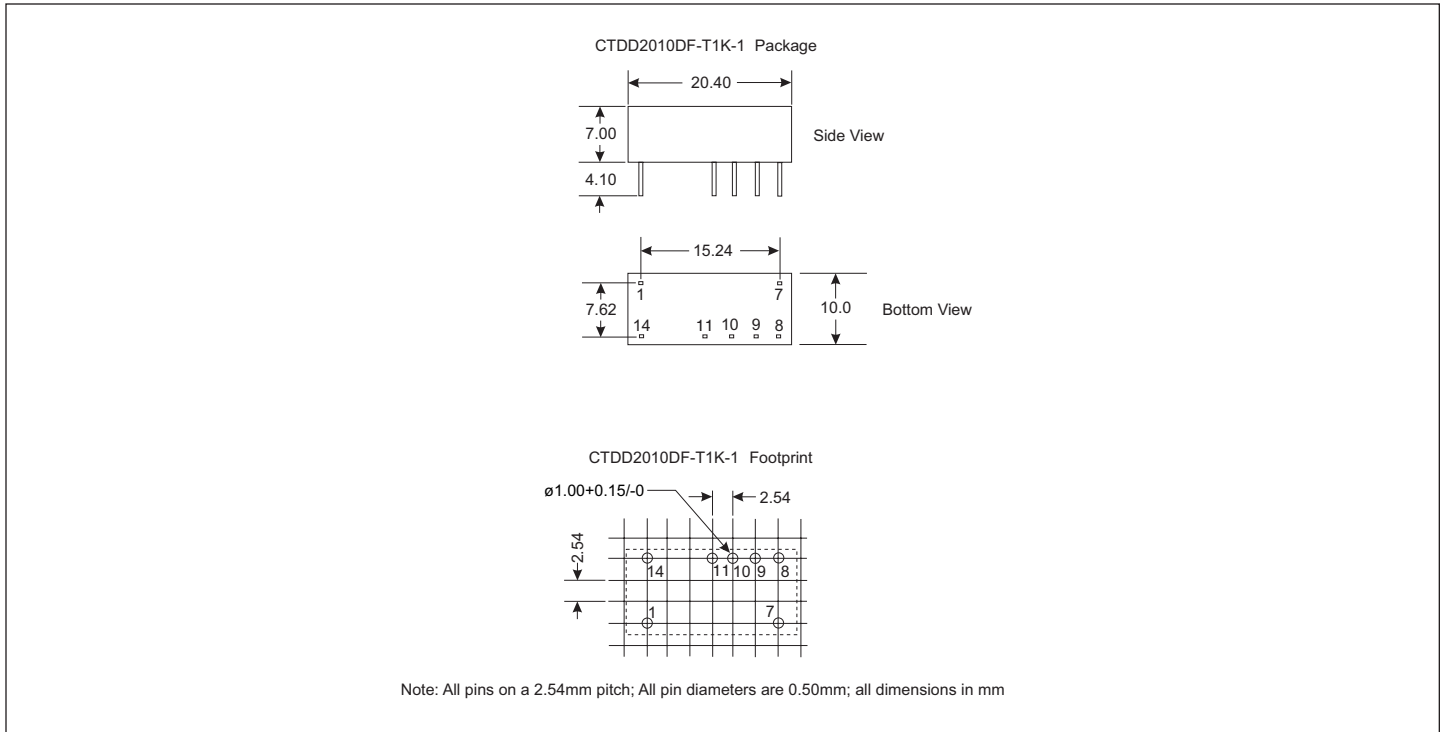
TYPICAL CHARACTERISTICS



CTDD2010DF-T1K-1 Series

Fixed Input Isolated & Unregulated
1W Output, Twin Independent Output

OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



PIN CONNECTIONS

| Pin | Function |
|-----|----------|
| 1 | GND |
| 7 | NC |
| 8 | +V02 |
| 9 | 0V2 |
| 10 | +Vo1 |
| 11 | 0V1 |
| 14 | Vin |

11.30.06