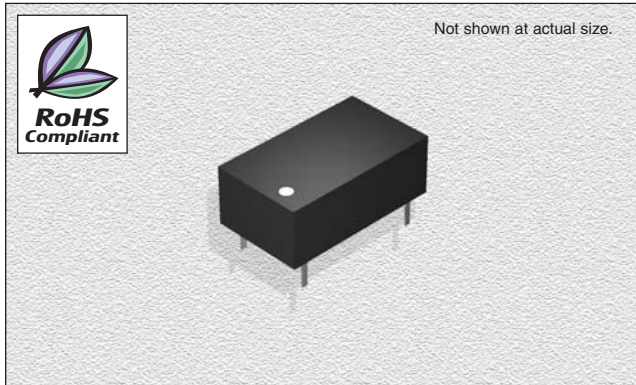


CTDD2010DF-DU1K-1 Series

Fixed Input Isolated & Unregulated
1W Output, Dual Output



FEATURES

- Efficiency:** To 80%
- Temperature Range:** -40°C to +85°C
- Isolation:** 1KVDC
- Power Density:** 0.70W/cm³
- Package:** UL94-V0
- Miscellaneous:** No heat sink required. No external component required. Industry standard pinout. Positive & Negative Voltage Output. Small footprint. DIP Package Style. Low Cost. **Samples available.**

CHARACTERISTICS

- Short Circuit Protection:** 1 second
- Temperature Rise at Full Load:** 25°C Max. 15°C Typ.
- Cooling:** Free air convection
- 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) | Vout (VDC) | Iout Max. (mA) | Iout Min. (mA) | Effi. Typ. (%) |
|------------------------|----------------|-------------------|------------|----------------|----------------|----------------|
| CTDD2010DF-0505-DU1K-1 | 5 | 4.5-5.5 | ±5 | ±100 | ±10 | 72 |
| CTDD2010DF-0509-DU1K-1 | 5 | 4.5-5.5 | ±9 | ±56 | ±6 | 75 |
| CTDD2010DF-0512-DU1K-1 | 5 | 4.5-5.5 | ±12 | ±42 | ±5 | 78 |
| CTDD2010DF-0515-DU1K-1 | 5 | 4.5-5.5 | ±15 | ±33 | ±4 | 79 |
| CTDD2010DF-1205-DU1K-1 | 12 | 10.8-13.2 | ±5 | ±100 | ±10 | 74 |
| CTDD2010DF-1209-DU1K-1 | 12 | 10.8-13.2 | ±9 | ±56 | ±6 | 76 |
| CTDD2010DF-1212-DU1K-1 | 12 | 10.8-13.2 | ±12 | ±42 | ±5 | 79 |
| CTDD2010DF-1215-DU1K-1 | 12 | 10.8-13.2 | ±15 | ±33 | ±4 | 80 |
| CTDD2010DF-2405-DU1K-1 | 24 | 21.6-26.4 | ±5 | ±100 | ±10 | 74 |
| CTDD2010DF-2409-DU1K-1 | 24 | 21.6-26.4 | ±9 | ±56 | ±6 | 76 |
| CTDD2010DF-2412-DU1K-1 | 24 | 21.6-26.4 | ±12 | ±42 | ±5 | 80 |
| CTDD2010DF-2415-DU1K-1 | 24 | 21.6-26.4 | ±15 | ±33 | ±4 | 81 |

ISOLATION SPECIFICATIONS

| Item | Test Condition | MIN | TYP | MAX | Units |
|----------------------|---------------------|------|-----|-----|-------|
| Isolation Voltage | Tested for 1 minute | 1000 | | | VDC |
| Isolation Resistance | Test at 500VDC | 1000 | | | MΩ |

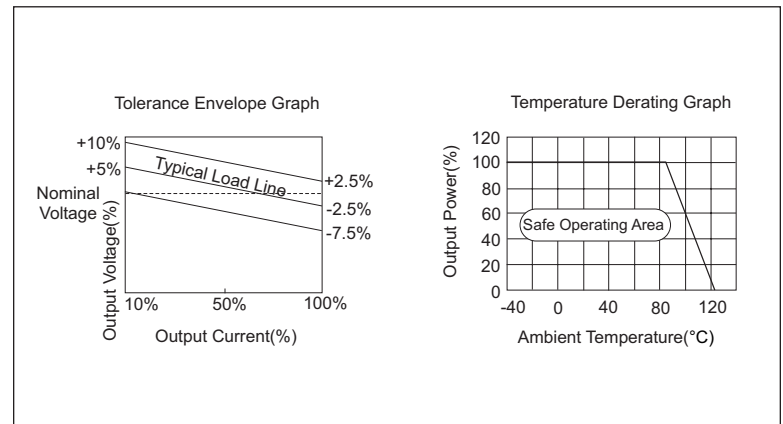
OUTPUT SPECIFICATIONS

| 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 | | 10 | 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

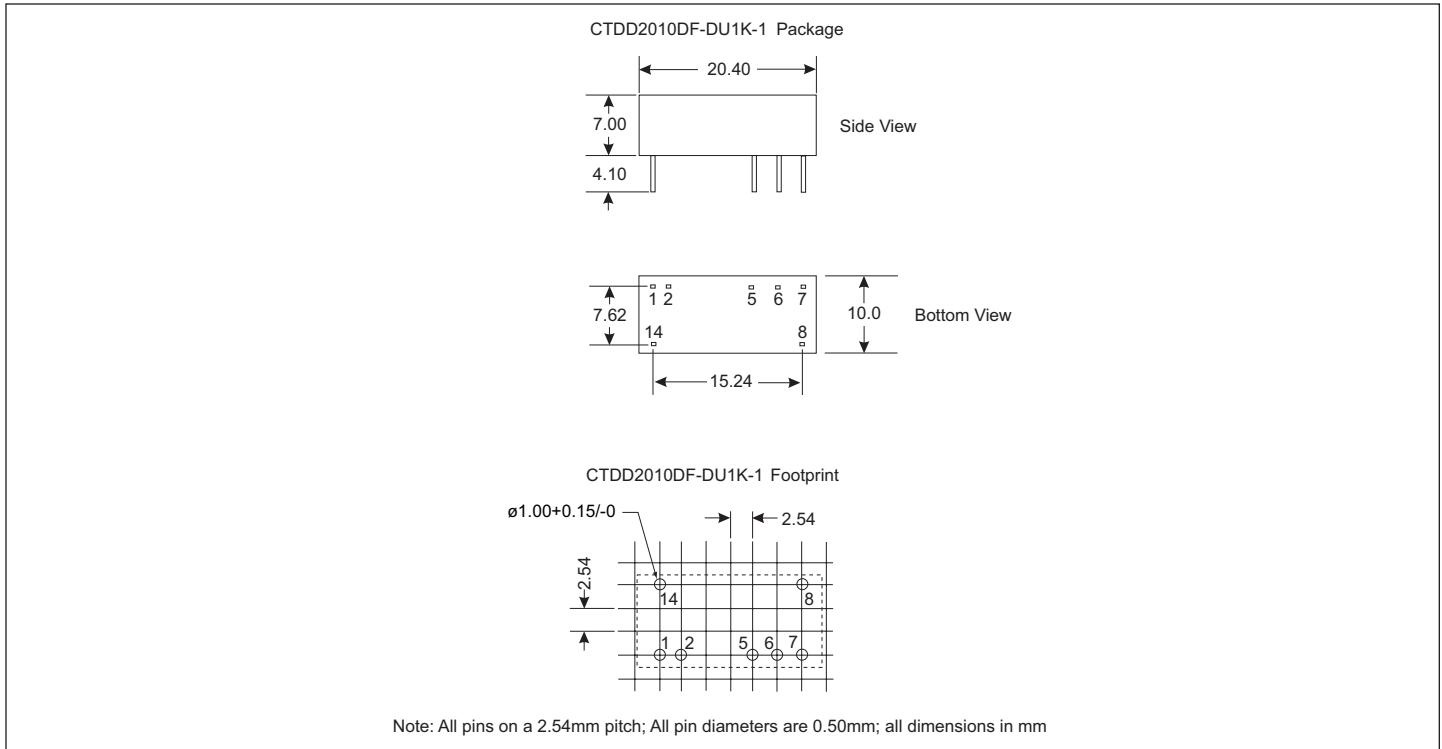


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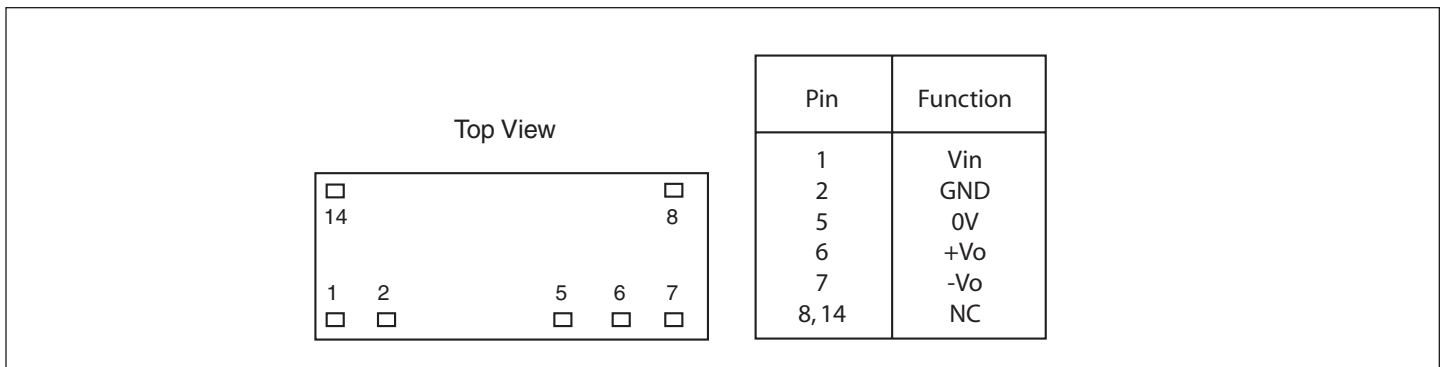
CTDD2010DF-DU1K-1 Series

Fixed Input Isolated & Unregulated
1W Output, Dual Output

OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



PIN CONNECTIONS



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