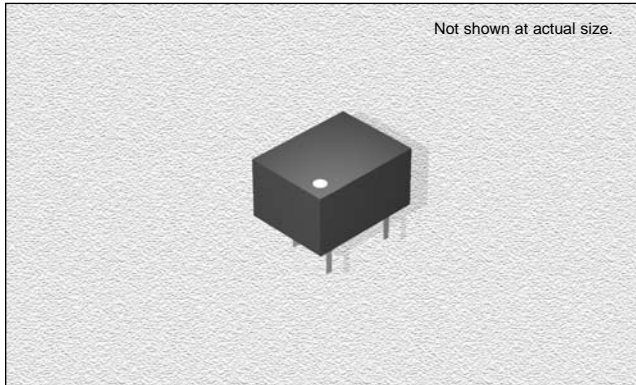


CTDD1210D-S Series

Fixed Input Isolated & Unregulated
1W Output, Single Output



FEATURES

- Efficiency:** To 80%
- Temperature Range:** -40°C to 85°C
- Isolation:** 1KVDC
- Package:** UL94-V0
- Miscellaneous:** Single Output Voltage. No heatsink required. No external components required. Industry standard pinout. Small footprint. 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
- Operating Temperature Range:** -40°C to +85°C
- Lead Temperature:** 300°C (1.5mm from case for 10 seconds)
- Storage Temperature Range:** -55°C to +125°C
- Storage Humidity Range:** ≤ 95%
- Case Material:** Plastic (UL94-V0)
- MTBF:** >1,000,000 hours

SPECIFICATIONS

| Part Number | Vin Nom. | Input Range | Vout | Iout Max. (mA) | Iout Min. (mA) | Effi(Typ.) |
|-------------------|----------|--------------|-------|----------------|----------------|------------|
| CTDD1210D-0505S-1 | 5VDC | 4.5-5.5VDC | 5VDC | 200 | 20 | 78% |
| CTDD1210D-0509S-1 | 5VDC | 4.5-5.5VDC | 9VDC | 111 | 12 | 79% |
| CTDD1210D-0512S-1 | 5VDC | 4.5-5.5VDC | 12VDC | 83 | 9 | 80% |
| CTDD1210D-0515S-1 | 5VDC | 4.5-5.5VDC | 15VDC | 67 | 7 | 78% |
| CTDD1210D-1205S-1 | 12VDC | 10.8-13.2VDC | 5VDC | 200 | 20 | 78% |
| CTDD1210D-1209S-1 | 12VDC | 10.8-13.2VDC | 9VDC | 111 | 12 | 80% |
| CTDD1210D-1212S-1 | 12VDC | 10.8-13.2VDC | 12VDC | 83 | 9 | 81% |
| CTDD1210D-1215S-1 | 12VDC | 10.8-13.2VDC | 15VDC | 67 | 7 | 79% |
| CTDD1210D-2405S-1 | 24VDC | 21.6-26.4VDC | 5VDC | 200 | 20 | 79% |
| CTDD1210D-2409S-1 | 24VDC | 21.6-26.4VDC | 9VDC | 111 | 12 | 80% |
| CTDD1210D-2412S-1 | 24VDC | 21.6-26.4VDC | 12VDC | 83 | 9 | 81% |
| CTDD1210D-2415S-1 | 24VDC | 21.6-26.4VDC | 15VDC | 67 | 7 | 79% |

ISOLATION SPECIFICATIONS

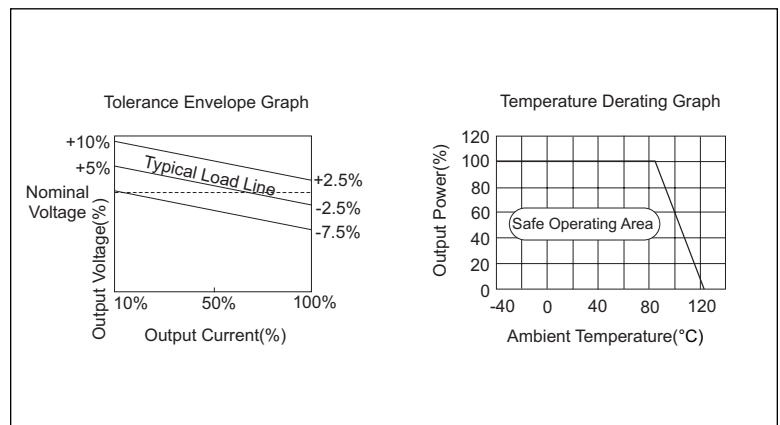
| Item | Test Condition | MIN | TYP | MAX | Units |
|----------------------|---------------------|------|-----|-----|-------|
| Isolation Voltage | Tested for 1 minute | 1000 | | | VDC |
| Isolation Resistance | Test at 500VDC | 1000 | | | MΩ |

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 | | | 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 | 150 | 200 | KHz |

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

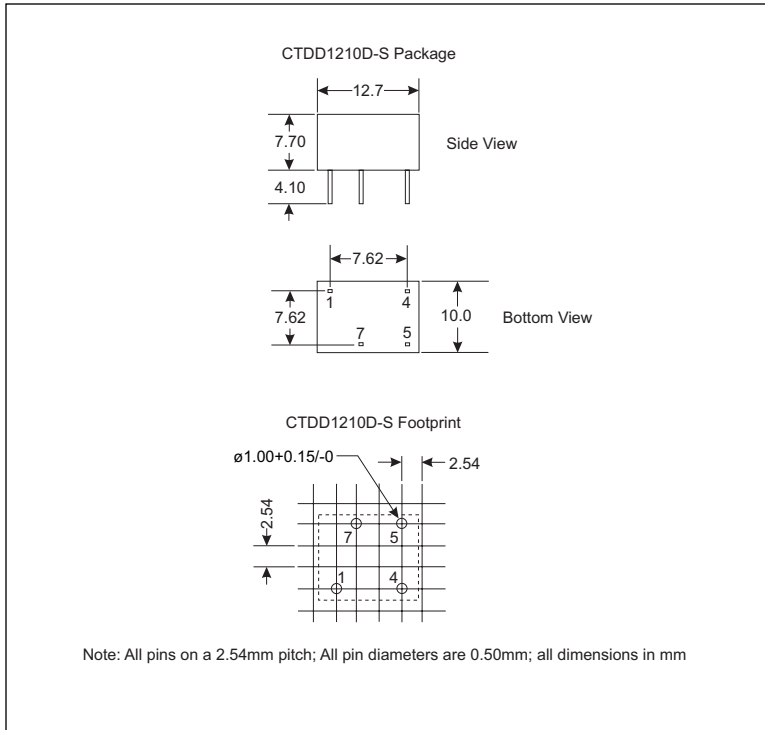
TYPICAL CHARACTERISTICS



CTDD1210D-S Series

Fixed Input Isolated & Unregulated
1W Output, Dual Output

OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



PIN CONNECTIONS

| Pin | Function |
|-----|-----------------|
| 1 | GND |
| 4 | V _{in} |
| 5 | +V |
| 7 | 0V |

12.08.04