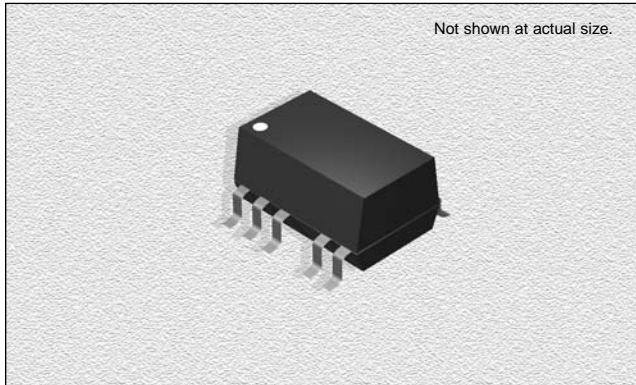


CTDD1508M-D Series

Fixed Input Isolated & Unregulated
1W Output, Dual Output



FEATURES

- Efficiency:** To 79%
- Temperature Range:** -40°C to 85°C
- Isolation:** 3KVDC
- Package:** UL94-V0
- Miscellaneous:** No heatsink required. No external component required. Industry standard pinout. Small footprint. High power density. Positive & negative voltage output. 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
- 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:** >1,000,000 hours

SPECIFICATIONS

| Part Number | Vin Nom. | Input Range | Vout | Iout Max. (mA) | Iout Min. (mA) | Effi(Typ.) |
|-------------------|----------|--------------|--------|----------------|----------------|------------|
| CTDD1508M-0505D-1 | 5VDC | 4.5-5.5VDC | ±5VDC | ±100 | ±10 | 72% |
| CTDD1508M-0509D-1 | 5VDC | 4.5-5.5VDC | ±9VDC | ±56 | ±6 | 75% |
| CTDD1508M-0512D-1 | 5VDC | 4.5-5.5VDC | ±12VDC | ±42 | ±5 | 78% |
| CTDD1508M-0515D-1 | 5VDC | 4.5-5.5VDC | ±15VDC | ±33 | ±4 | 78% |
| CTDD1508M-1205D-1 | 12VDC | 10.8-13.2VDC | ±5VDC | ±100 | ±10 | 74% |
| CTDD1508M-1209D-1 | 12VDC | 10.8-13.2VDC | ±9VDC | ±56 | ±6 | 76% |
| CTDD1508M-1212D-1 | 12VDC | 10.8-13.2VDC | ±12VDC | ±42 | ±5 | 79% |
| CTDD1508M-1215D-1 | 12VDC | 10.8-13.2VDC | ±15VDC | ±33 | ±4 | 79% |

ISOLATION SPECIFICATIONS

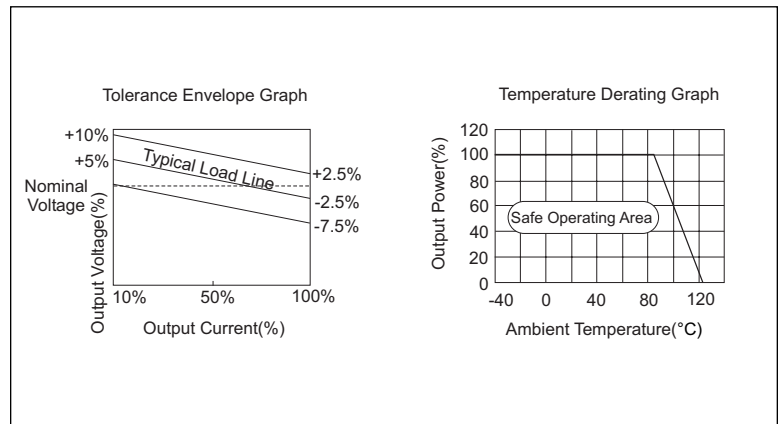
| Item | Test Condition | MIN | TYP | MAX | Units |
|----------------------|---------------------|------|-----|-----|-------|
| Isolation Voltage | Tested for 1 minute | 3000 | | | VDC |
| Isolation Resistance | Test at 500VDC | 1000 | | | MΩ |

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% load(5V output) | | 10 | 12 | % |
| | 10% to 100% load(9V output) | | 6.5 | 8.0 | % |
| | 10% to 100% load(12V output) | | 6.0 | 8.5 | % |
| | 10% to 100% load(15V output) | | 6.0 | 7.0 | % |
| 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.

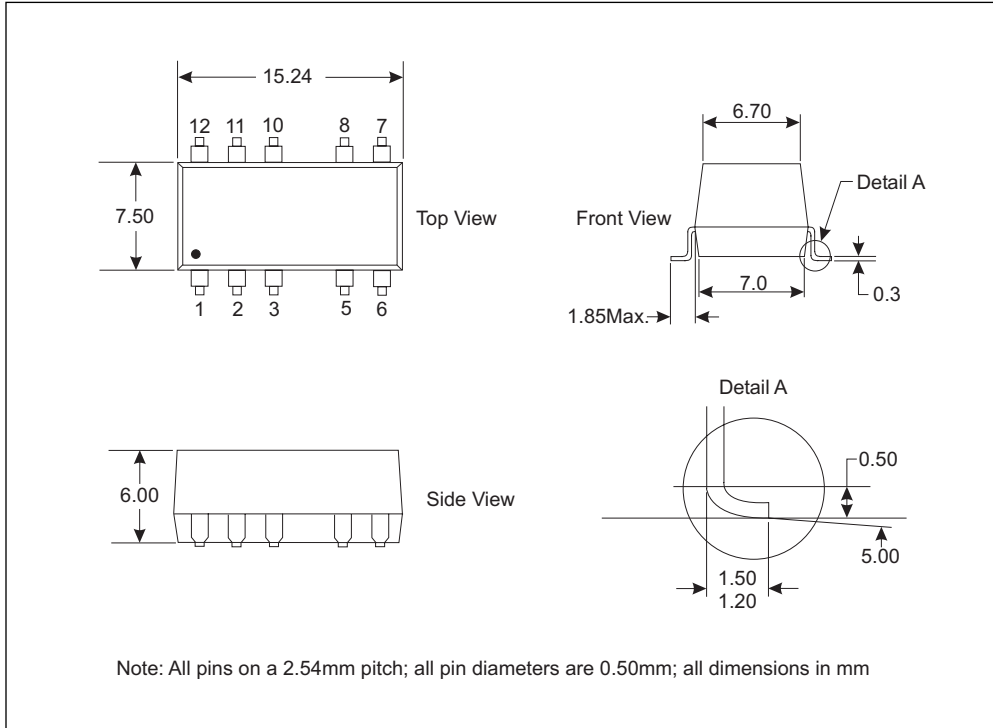
TYPICAL CHARACTERISTICS



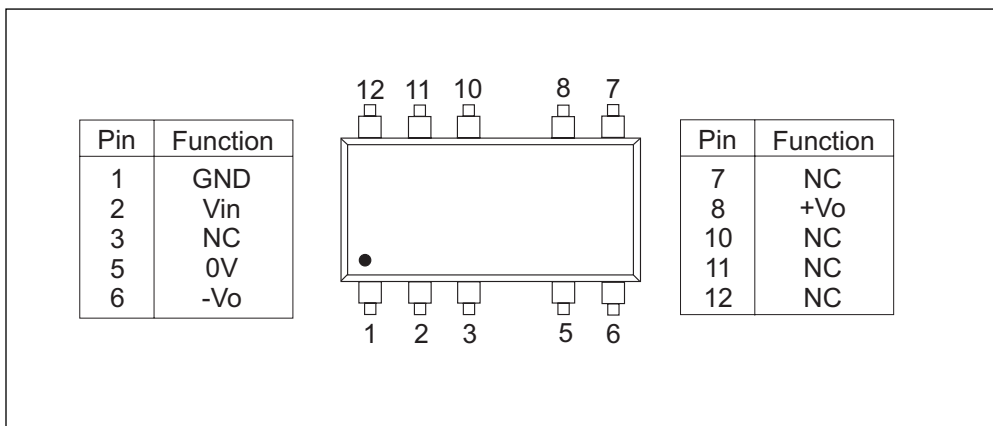
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1W Output, Dual Output

OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



PIN CONNECTIONS



02.23.05