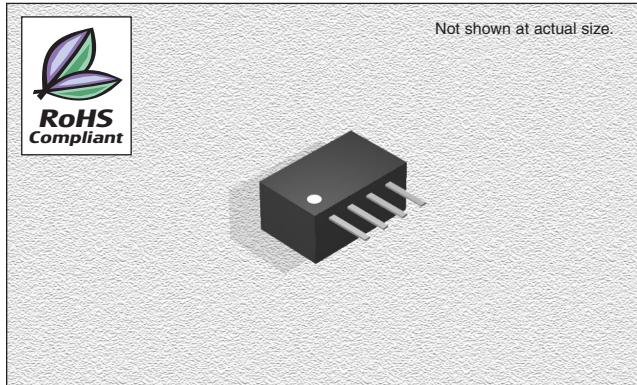


CTDD1106SF-S1K

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. Fixed input voltage.

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

SPECIFICATIONS

| Part Number | Vin Nom. (VDC) | Input Range (VDC) | Vout (VDC) | Iout Max. (mA) | Iout Min. (mA) | Effi. Typ. (%) |
|---------------------|----------------|-------------------|------------|----------------|----------------|----------------|
| CTDD1106SF-2405-S1K | 24 | 21.6-26.4 | 5 | 200 | 20 | 72 |
| CTDD1106SF-2409-S1K | 24 | 21.6-26.4 | 9 | 111 | 12 | 76 |
| CTDD1106SF-2412-S1K | 24 | 21.6-26.4 | 12 | 83 | 9 | 78 |
| CTDD1106SF-2415-S1K | 24 | 21.6-26.4 | 15 | 67 | 7 | 80 |
| CTDD1106SF-2424-S1K | 24 | 21.6-26.4 | 24 | 42 | 3 | 78 |

ISOLATION SPECIFICATIONS

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

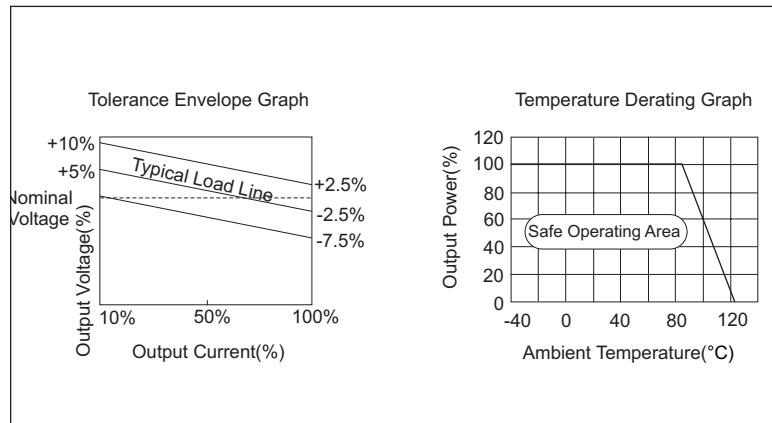
OUTPUT SPECIFICATIONS

| 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 |
| Noise | 20MHz Bandwidth | | 75 | 150 | 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



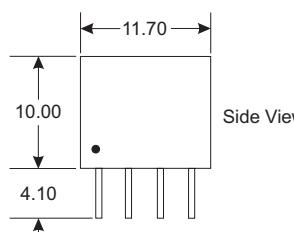
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CTDD1106SF-S1K Series

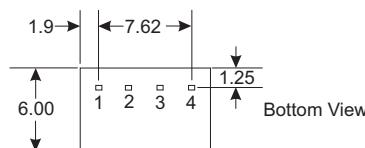
Fixed Input Isolated & Unregulated
1W Output, Single Output

OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS

CTDD1106SF-S1K Package

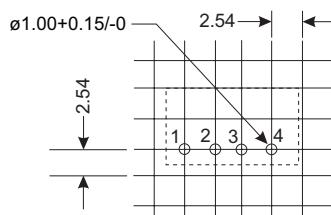


Side View



Bottom View

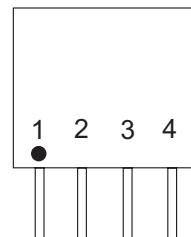
CTDD1106SF-S1K Footprint



Note: All pins on a 2.54mm pitch; All pin diameters are 0.50mm; all dimensions in mm
Tolerances $\pm 0.25\text{mm}$

PIN CONNECTIONS

| Pin | Function |
|-----|----------|
| 1 | GND |
| 2 | Vin |
| 3 | 0V |
| 4 | +Vo |



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