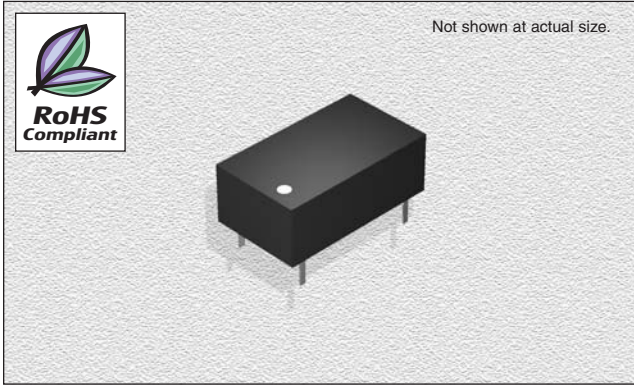


## CTDD2010DF-DU1K-1 Series

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/cm<sup>3</sup>
- 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

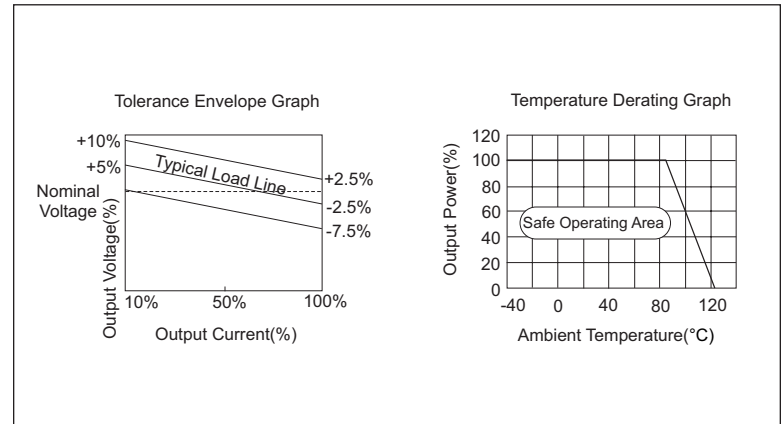
### OUTPUT SPECIFICATIONS

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

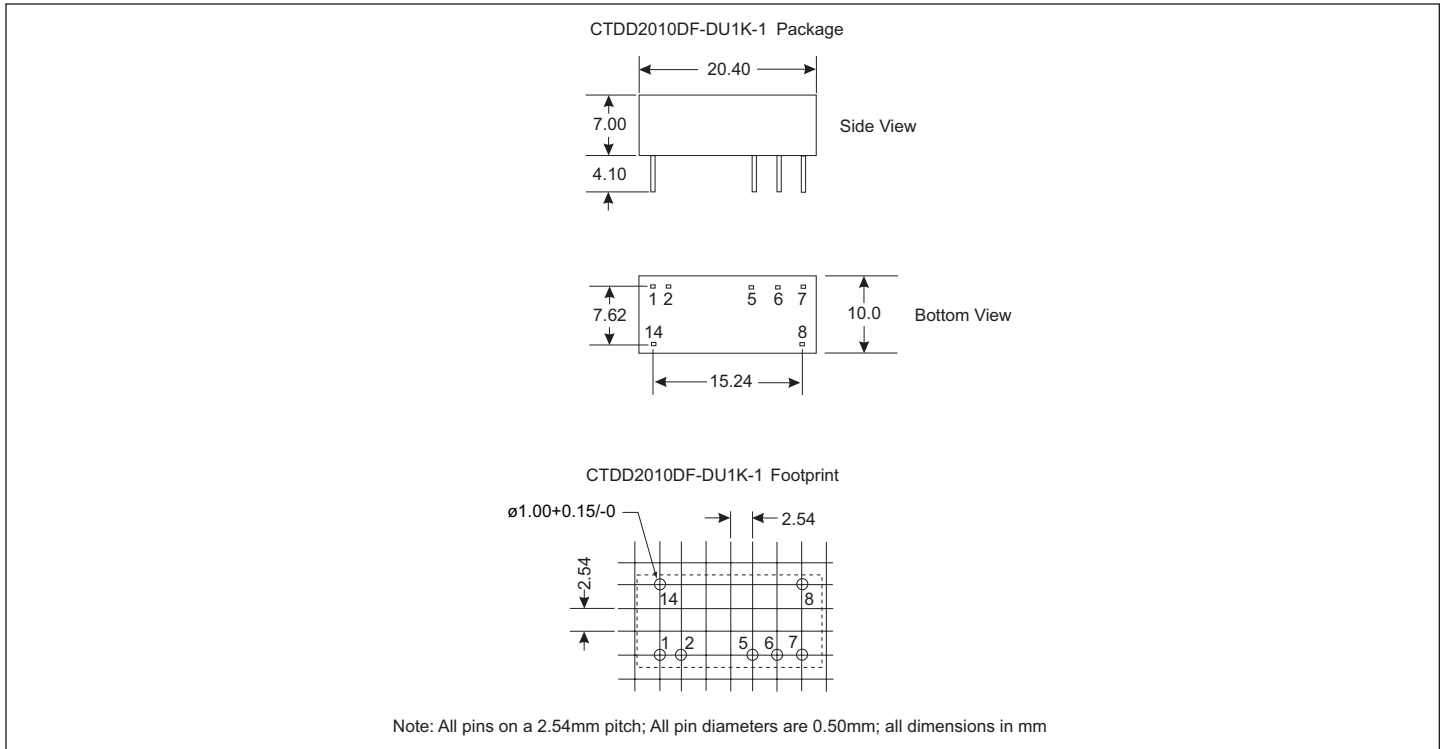


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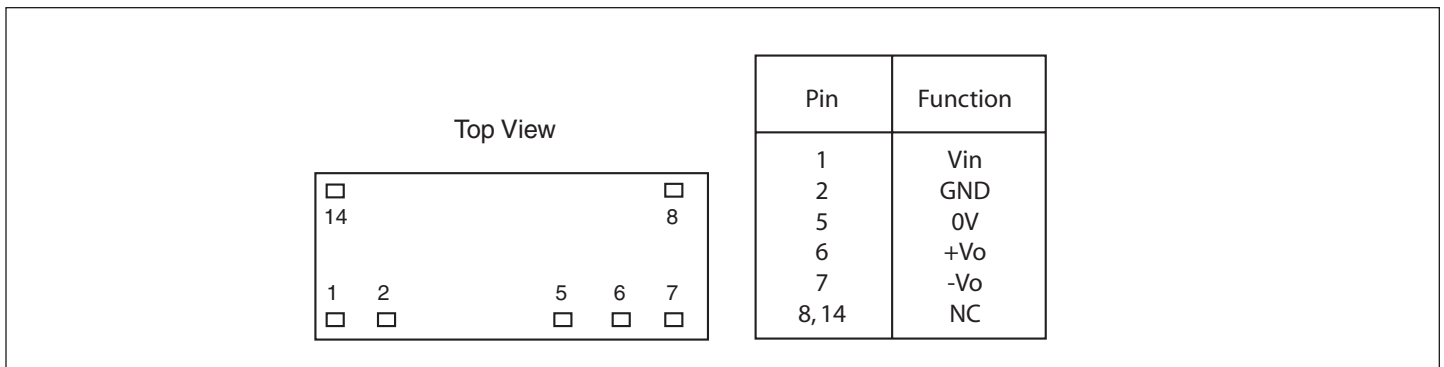
## CTDD2010DF-DU1K-1 Series

Fixed Input Isolated & Unregulated  
1W Output, Dual Output

### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



### PIN CONNECTIONS



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