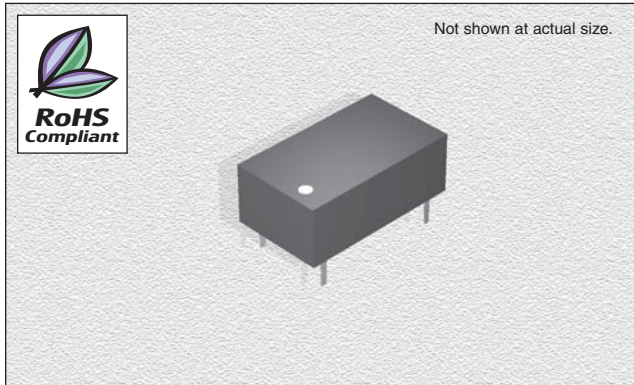


## CTDD2010DF-D1K-1 Series

Fixed Input Isolated & Unregulated  
1W Output, Dual Output



### FEATURES

- Efficiency:** To 80%
- Temperature Range:** -40°C to +85°C
- Isolation:** 1KVDC
- Package:** UL94-V0
- Miscellaneous:** Positive & Negative Voltage Output. No heat sink required. No external components required. Industry standard pinout. Small Footprint. DIP package style. Power Density 0.85W/cm<sup>3</sup>. 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)	Vin Range (VDC)	Voltage Out (VDC)	Io Max. (mA)	Io Min. (mA)	Effi. Typ. (%)
CTDD2010DF-0505-D1K-1	5	4.5-5.5	±5	±100	±10	72
CTDD2010DF-0509-D1K-1	5	4.5-5.5	±9	±56	±6	75
CTDD2010DF-0512-D1K-1	5	4.5-5.5	±12	±42	±5	78
CTDD2010DF-0515-D1K-1	5	4.5-5.5	±15	±33	±4	79
CTDD2010DF-1205-D1K-1	12	10.8-13.2	±5	±100	±10	74
CTDD2010DF-1209-D1K-1	12	10.8-13.2	±9	±56	±6	76
CTDD2010DF-1212-D1K-1	12	10.8-13.2	±12	±42	±5	79
CTDD2010DF-1215-D1K-1	12	10.8-13.2	±15	±33	±4	80
CTDD2010DF-2405-D1K-1	24	21.6-26.4	±5	±100	±10	74
CTDD2010DF-2409-D1K-1	24	21.6-26.4	±9	±56	±6	76
CTDD2010DF-2412-D1K-1	24	21.6-26.4	±12	±42	±5	80
CTDD2010DF-2415-D1K-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

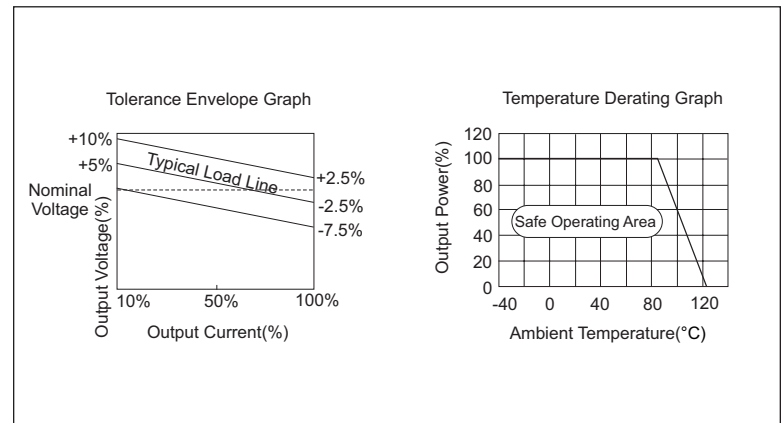
### OUTPUT SPECIFICATIONS

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



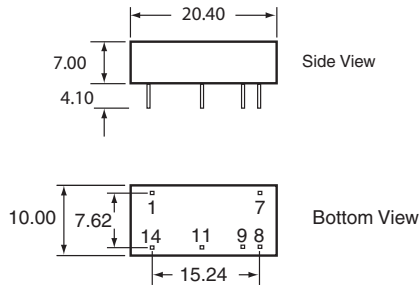
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## CTDD2010DF-D1K-1 Series

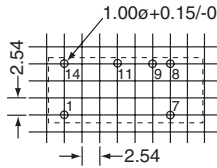
Fixed Input Isolated & Unregulated  
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### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS

CTDD2010DF-D1K-1 Package



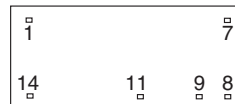
CTDD2010DF-D1K-1 Footprint



Note: All Pins on a 2.54m pitch; all pin diameters are 0.50mm; all dimensions in mm.

### PIN CONNECTIONS

Pin	Function
1	GND
7	NC
8	0V
9	+Vo
11	-Vo
14	Vin



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