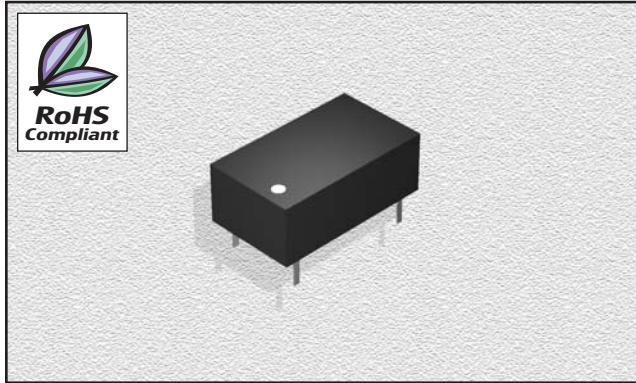


## CTDD2010DF-SU1K-2 Series

Fixed Input Isolated & Unregulated  
2W Output, Single Output



### FEATURES

- Efficiency:** To 86%
- Temperature Range:** -40°C to +85°C
- Isolation:** 1KVDC
- Package:** UL94-V0
- Miscellaneous:** No heat sink required. No external component required. Industry standard pinout. Miniature DIP package. Single Output Voltage. Fully Encapsulated. Power Density up to 1.40W/cm<sup>3</sup>. PCB Mounting. Footprint from 1.05cm<sup>2</sup>. 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
- Miscellaneous:** RoHS Compliant.

### SPECIFICATIONS

Part Number	Vin Nom. (VDC)	Input Range (VDC)	Vout (VDC)	Iout Max. (mA)	Iout Min. (mA)	Effi. Typ. (%)
CTDD2010DF-0505-SU1K-2	5	4.5-5.5	5	400	40	81
CTDD2010DF-0509-SU1K-2	5	4.5-5.5	9	222	23	82
CTDD2010DF-0512-SU1K-2	5	4.5-5.5	12	167	17	84
CTDD2010DF-0515-SU1K-2	5	4.5-5.5	15	133	14	84
CTDD2010DF-1205-SU1K-2	12	10.8-13.2	5	400	40	82
CTDD2010DF-1209-SU1K-2	12	10.8-13.2	9	222	23	83
CTDD2010DF-1212-SU1K-2	12	10.8-13.2	12	167	17	85
CTDD2010DF-1215-SU1K-2	12	10.8-13.2	15	133	14	85
CTDD2010DF-2405-SU1K-2	24	21.6-26.4	5	400	40	83
CTDD2010DF-2409-SU1K-2	24	21.6-26.4	9	222	23	84
CTDD2010DF-2412-SU1K-2	24	21.6-26.4	12	167	17	86
CTDD2010DF-2415-SU1K-2	24	21.6-26.4	15	133	14	86
CTDD2010DF-2424-SU1K-2	24	21.6-26.4	24	83	8	86

### ISOLATION SPECIFICATIONS

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

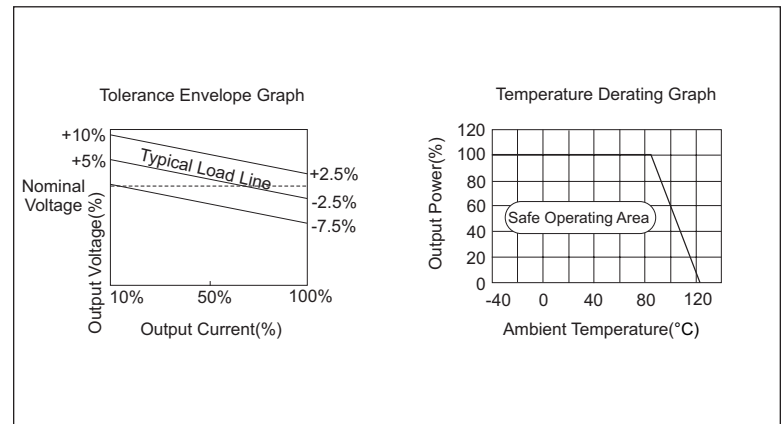
### OUTPUT SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
Output Power		0.2		2	W
Line regulation	For Vin change of 1%			1.2	%
Load regulation	10% to 100%		10	15	%
Output voltage accuracy	See tolerance envelope graph				
Temperature drift	100% Full load			0.03	%/°C
Output ripple	20MHz Bandwidth		100	150	mVp-p
Switching frequency	Full load, nominal input		75		KHz

Note:

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

### TYPICAL CHARACTERISTICS

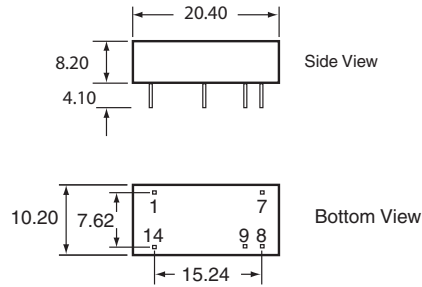


## CTDD2010DF-SU1K-2 Series

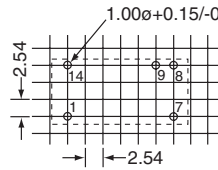
Fixed Input Isolated & Unregulated  
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### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS

CTDD2010DF-SU1K-2 Package



CTDD2010DF-SU1K-2 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	+V
14	Vin



01.08.07