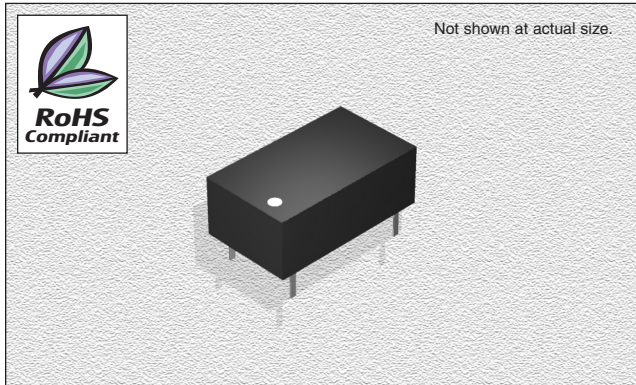


## CTDD2010DF-TU1K-1 Series

Fixed Input Isolated & Unregulated  
1W Output, Twin Independent Output



### FEATURES

- Efficiency:** To 81%
- Temperature Range:** -40°C to +85°C
- Isolation:** 1KVDC
- Package:** UL94-V0
- Miscellaneous:** No heat sink required. No external components required. Industry standard pinout. Miniature DIP package. Twin Output Voltage. Optimized Volume. PCB Mounting. 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
- 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)	Vo1,Vo2 (VDC)	Io1, Io2 Max. (mA)	Io1, Io2 Min. (mA)	Effi. Typ. (%)
CTDD2010DF-050505-TU1K-1	5	4.5-5.5	5	100	10	72
CTDD2010DF-050909-TU1K-1	5	4.5-5.5	9	56	6	75
CTDD2010DF-051212-TU1K-1	5	4.5-5.5	12	42	4	78
CTDD2010DF-120505-TU1K-1	12	10.8-13.2	5	100	10	74
CTDD2010DF-120909-TU1K-1	12	10.8-13.2	9	56	6	76
CTDD2010DF-240505-TU1K-1	24	21.6-26.4	5	100	10	74
CTDD2010DF-240909-TU1K-1	24	21.6-26.4	9	56	6	76
CTDD2010DF-241212-TU1K-1	24	21.6-26.4	12	42	4	80
CTDD2010DF-241515-TU1K-1	24	21.6-26.4	15	33	3	81
CTDD2010DF-222205-TU1K-1	22	19.8-24.2	22/5	23/100	2/10	72

Note: here Io1 and Io2 are corresponded with Vo1 and Vo2.

### ISOLATION SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
Isolation Voltage	Tested for 1 minute	1000			VDC
Isolation Resistance(Vin/Vout)	Test at 500VDC	1000			MΩ
Isolation Resistance(Vo1/Vo2)	Test at 500VDC	1000			MΩ

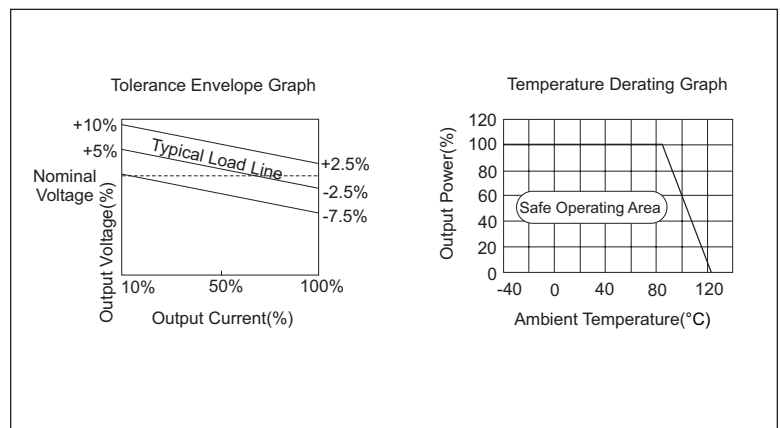
### OUTPUT SPECIFICATIONS

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			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.

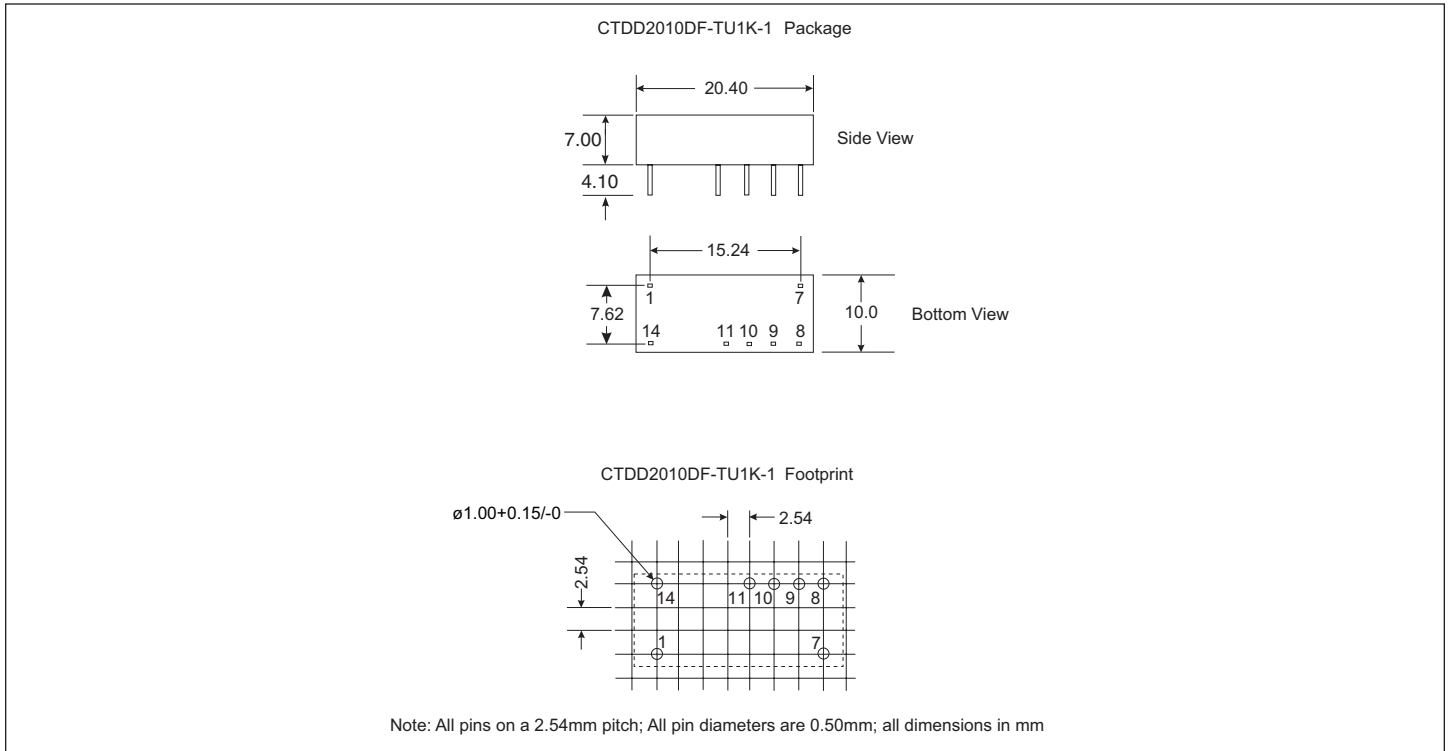
### TYPICAL CHARACTERISTICS



## CTDD2010DF-TU1K-1 Series

Fixed Input Isolated & Unregulated  
1W Output, Twin Independent Output

### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



### PIN CONNECTIONS

Pin	Function
1	GND
7	NC
8	+V02
9	0V2
10	+Vo1
11	0V1
14	Vin

06.04.07