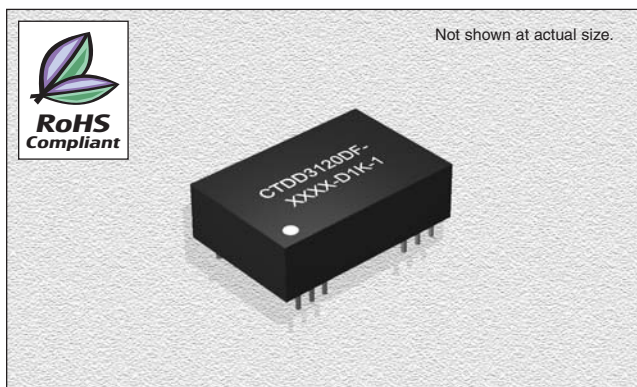


## CTDD3120DF-D1K-1 Series

### Fixed Input Isolated & Regulated

### 1W Output, Dual Output



### FEATURES

- Efficiency:** To 73%
- Temperature Range:** -40°C to +85°C
- Isolation:** 1KVDC
- Package:** UL94-V0
- Miscellaneous:** No heat sink required. No external components required. Industry standard pinout. Dual Output Voltage. Small Footprint. Dip package style. Power Density 0.16W/cm<sup>3</sup>. 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
- 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. (%)
CTDD3120DF-0505-D1K-1	5	4.75-5.25	±5	±100	±10	69
CTDD3120DF-0509-D1K-1	5	4.75-5.25	±9	±56	±6	70
CTDD3120DF-0512-D1K-1	5	4.75-5.25	±12	±42	±4	72
CTDD3120DF-0515-D1K-1	5	4.75-5.25	±15	±33	±4	72
CTDD3120DF-1205-D1K-1	12	11.4-12.6	±5	±100	±10	70
CTDD3120DF-1209-D1K-1	12	11.4-12.6	±9	±56	±6	72
CTDD3120DF-1212-D1K-1	12	11.4-12.6	±12	±42	±5	73
CTDD3120DF-1215-D1K-1	12	11.4-12.6	±15	±33	±4	73
CTDD3120DF-2405-D1K-1	24	22.8-25.2	±5	±100	±10	72
CTDD3120DF-2409-D1K-1	24	22.8-25.2	±9	±56	±6	72
CTDD3120DF-2412-D1K-1	24	22.8-25.2	±12	±42	±4	73
CTDD3120DF-2415-D1K-1	24	22.8-25.2	±15	±33	±4	73

### ISOLATION SPECIFICATIONS

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

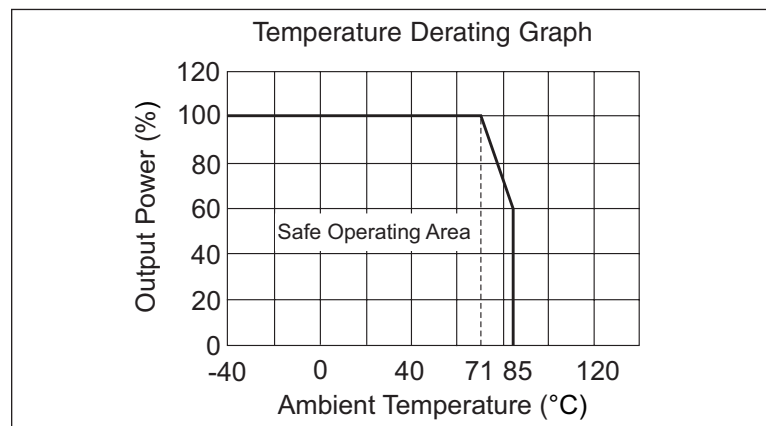
### OUTPUT SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
Output Power		0.1		1	W
Line regulation	For Vin change of 5%			0.25	%
Load regulation	10% to 100% full load			1	%
Output voltage accuracy	See tolerance envelope graph			±3	
Temperature drift	100% full load			0.03	%/°C
Output ripple	20MHz Bandwidth		10	15	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.

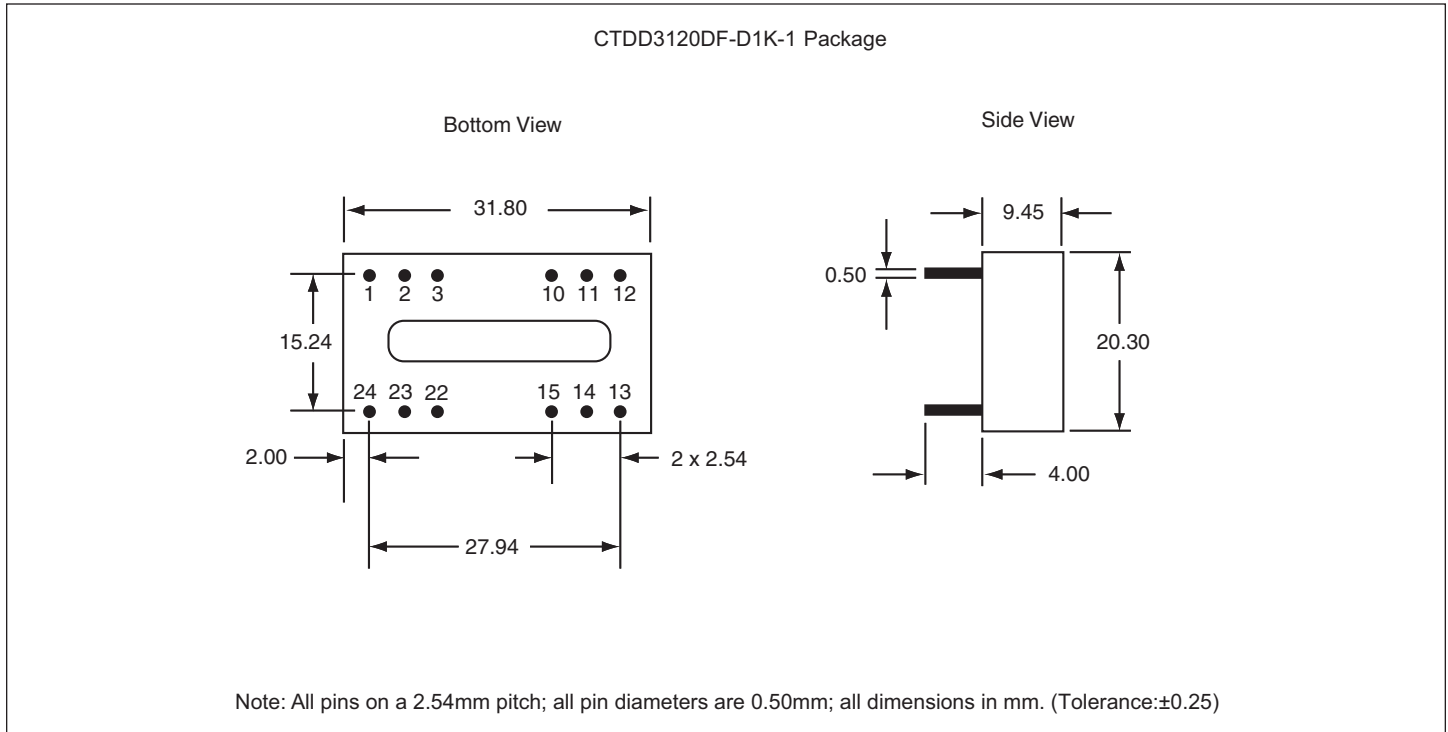
### TYPICAL CHARACTERISTICS



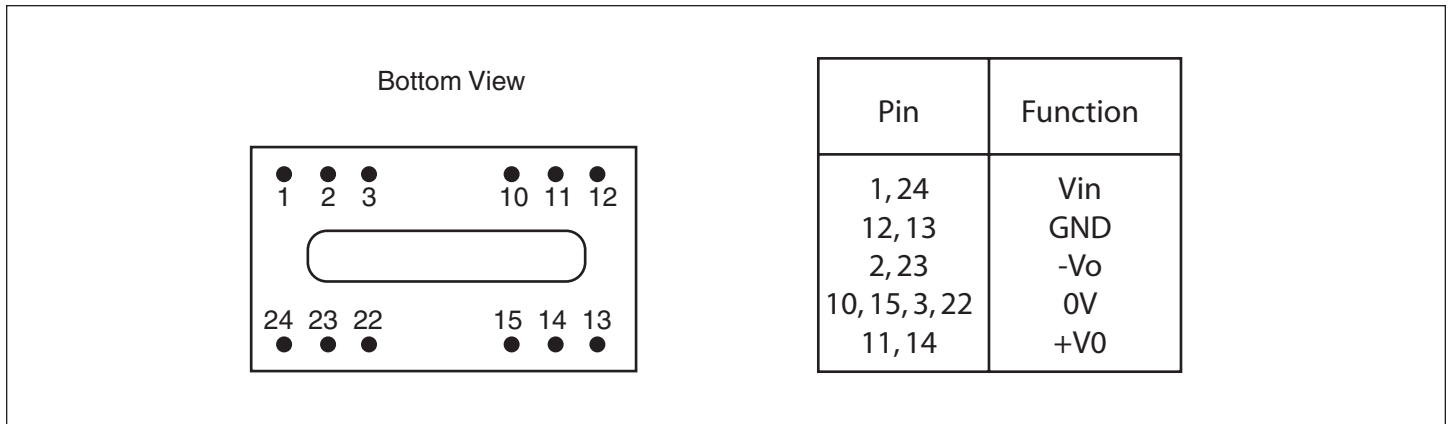
## CTDD3120DF-D1K-1 Series

Fixed Input Isolated & Regulated  
1W Output, Dual Output

### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



### PIN CONNECTIONS



12.13.06