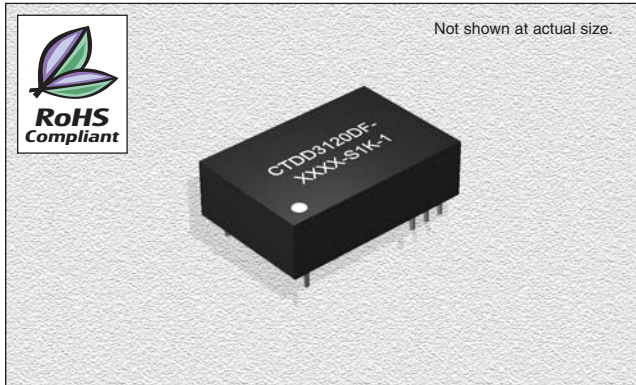


## CTDD3120DF-S1K-1 Series

Fixed Input Isolated & Regulated  
1W Output, Single Output



### FEATURES

- Efficiency:** To 73%
- Temperature Range:** -40°C to 85°C
- Isolation:** 1KVDC
- Package:** UL94-V0
- Miscellaneous:** Single Output Voltage. No heatsink required. No external components required. Industry standard pinout. Small footprint. 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)	Input Range (VDC)	Vout (VDC)	Iout Max. (mA)	Iout Min. (mA)	Effi. Typ. (%)
CTDD3120DF-0505-S1K-W75	5	4.75-5.25	5	150	15	69
CTDD3120DF-0509-S1K-1	5	4.75-5.25	9	110	11	70
CTDD3120DF-0512-S1K-1	5	4.75-5.25	12	83	9	71
CTDD3120DF-0515-S1K-1	5	4.75-5.25	15	67	7	72
CTDD3120DF-1205-S1K-W75	12	11.4-12.6	5	150	15	69
CTDD3120DF-1209-S1K-1	12	11.4-12.6	9	110	11	71
CTDD3120DF-1212-S1K-1	12	11.4-12.6	12	83	9	72
CTDD3120DF-1215-S1K-1	12	11.4-12.6	15	67	7	72
CTDD3120DF-2405-S1K-W75	24	22.8-25.2	5	150	15	70
CTDD3120DF-2409-S1K-1	24	22.8-25.2	9	110	11	72
CTDD3120DF-2412-S1K-1	24	22.8-25.2	12	83	9	73
CTDD3120DF-2415-S1K-1	24	22.8-25.2	15	67	7	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

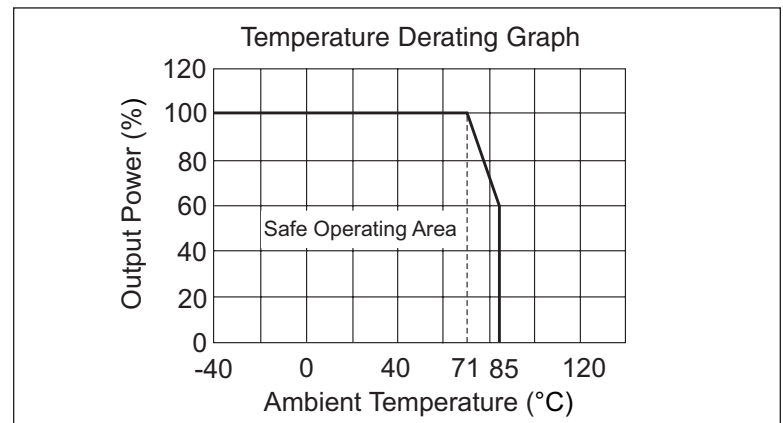
### OUTPUT SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
Output Power		0.1		1	W
Line regulation	For Vin change of 1%			0.25	%
Load regulation	10% to 100% full load			1	%
Output voltage accuracy	100% full load			±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

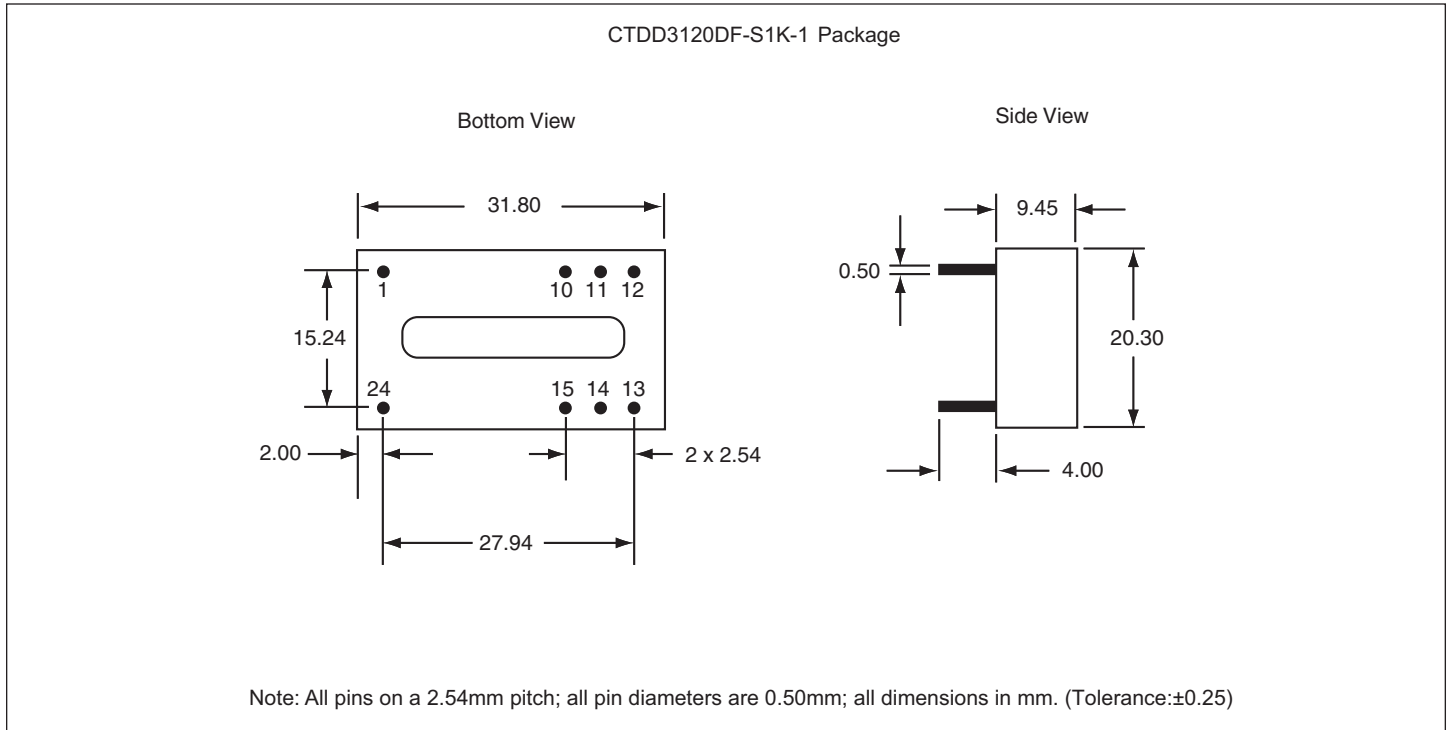


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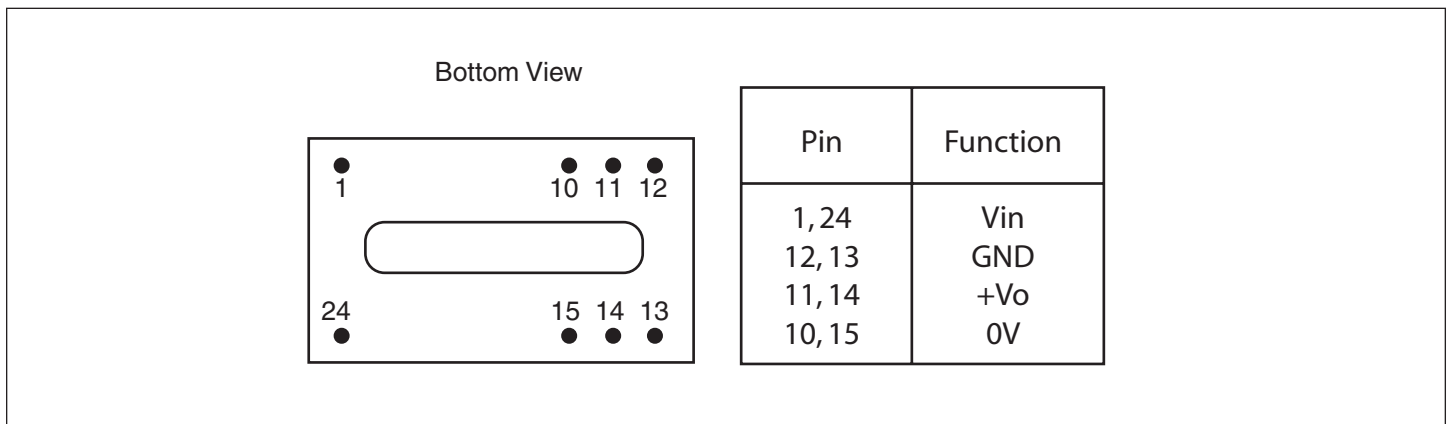
## CTDD3120DF-S1K-1 Series

Fixed Input Isolated & Regulated  
1W Output, Single Output

### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



### PIN CONNECTIONS



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