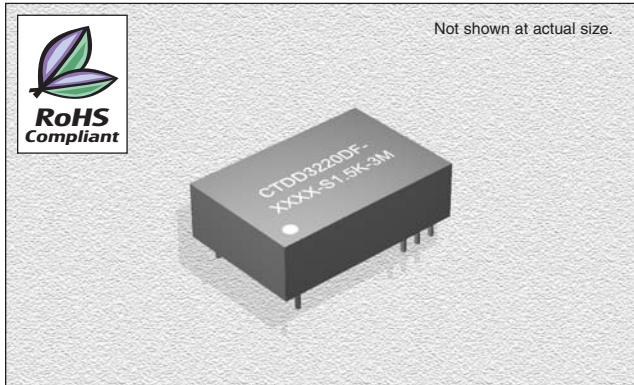


CTDD3220DF-S1.5K-3M

Series

Wide Input Isolated & Regulated
3W Output, Single Output



FEATURES

- Efficiency:** To 83%
- Temperature Range:** -40°C to +85°C
- Isolation:** 1.5KVDC
- Miscellaneous:** Wide (2:1) Input Range. Single Output. No heat sink required. Industry standard pinout.
- Samples available.**

CHARACTERISTICS

- Output Short Circuit Protection:** Continuous, Auto Recovery
- Temperature Rise at Full Load:** 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:** Metal
- MTBF:** >1,000,000 hours
- Isolation Voltage:** 1,500VDC
- Isolation Resistance:** >1,000MΩ
- Weight:** 15G
- Miscellaneous:** RoHS Compliant.

SPECIFICATIONS

Part Number	Vin Nom. (VDC)	Input Range (VDC)	Vin Max.* (VDC)	Vout (VDC)	Iout Max. (mA)	Iout Min. (mA)	Effi. Typ. (%)
CTDD3220DF-0505-S1.5K-3M	5	4.5-9	11	5	600	60	68
CTDD3220DF-0509-S1.5K-3M	5	4.5-9	11	9	333	34	72
CTDD3220DF-0512-S1.5K-3M	5	4.5-9	11	12	250	25	72
CTDD3220DF-0515-S1.5K-3M	5	4.5-9	11	15	200	20	73
CTDD3220DF-0524-S1.5K-3M	5	4.5-9	11	24	125	12	71
CTDD3220DF-1205-S1.5K-3M	12	9-18	22	5	600	60	74
CTDD3220DF-1209-S1.5K-3M	12	9-18	22	9	333	34	78
CTDD3220DF-1212-S1.5K-3M	12	9-18	22	12	250	25	80
CTDD3220DF-1215-S1.5K-3M	12	9-18	22	15	200	20	79
CTDD3220DF-1224-S1.5K-3M	12	9-18	22	24	125	12	78
CTDD3220DF-2405-S1.5K-3M	24	18-36	40	5	600	60	76
CTDD3220DF-2409-S1.5K-3M	24	18-36	40	9	333	34	80
CTDD3220DF-2412-S1.5K-3M	24	18-36	40	12	250	25	82
CTDD3220DF-2415-S1.5K-3M	24	18-36	40	15	200	20	81
CTDD3220DF-2424-S1.5K-3M	24	18-36	40	24	125	12	80
CTDD3220DF-4805-S1.5K-3M	48	36-72	80	5	600	60	76
CTDD3220DF-4809-S1.5K-3M	48	36-72	80	9	333	34	78
CTDD3220DF-4812-S1.5K-3M	48	36-72	80	12	250	25	81
CTDD3220DF-4815-S1.5K-3M	48	36-72	80	15	200	20	83
CTDD3220DF-4824-S1.5K-3M	48	36-72	80	24	125	12	80

*If Input voltage above specified may cause permanent damage to the device

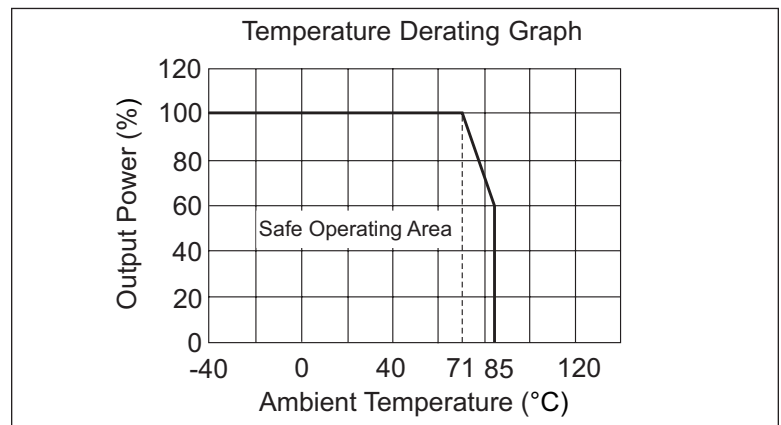
OUTPUT SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
3W Output Power		0.3		3	W
Positive Voltage accuracy	Refer to Recommended Circuit		±1	±2	%
Load regulation	From 10% to 100% load		±0.5	±0.75	%
Line regulation	Input Voltage from low to high		±0.2	±0.5	%
Temperature drift (Vout)	Refer to Temp. Derating Graph			0.03	%/°C
Ripple	20Hz to 300KHz Bandwidth			50	mVp-p
Noise	DC-20MHz Bandwidth		100	200	mVp-p
Switching frequency	100% load, nominal input voltage		100-650PFM		KHz
Isolation Capacitance			100		PF

Note:

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

TYPICAL CHARACTERISTICS

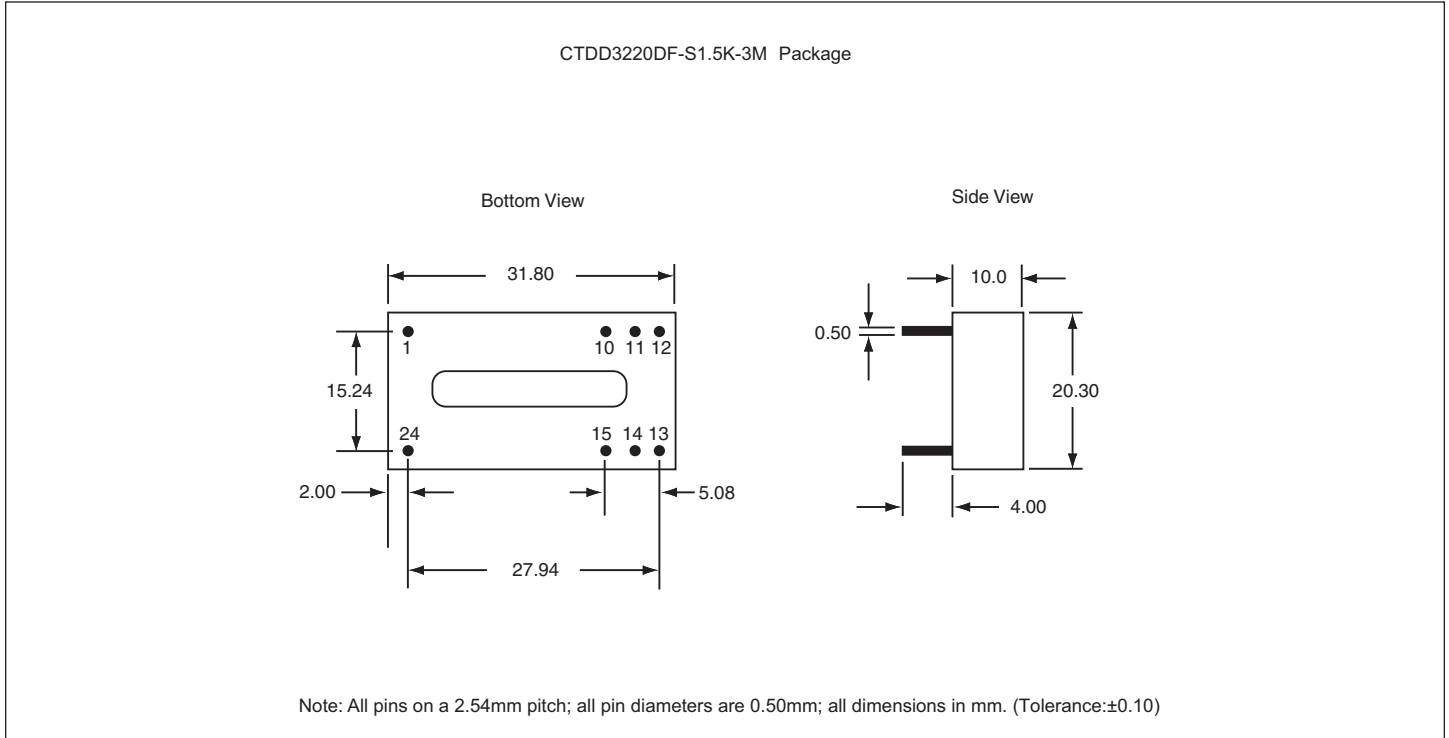


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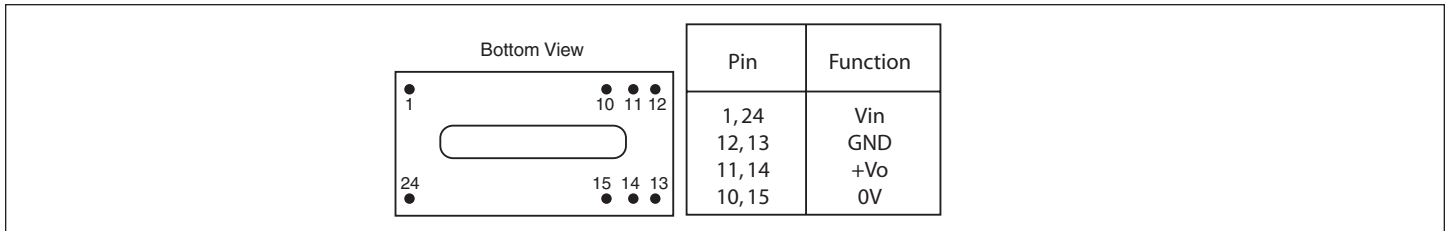
CTDD3220DF-S1.5K-3M Series

Wide Input Isolated & Regulated
3W Output, Single Output

OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



PIN CONNECTIONS

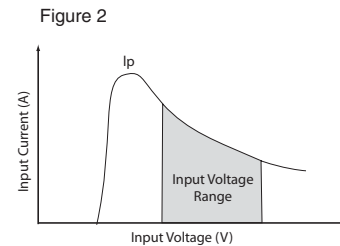
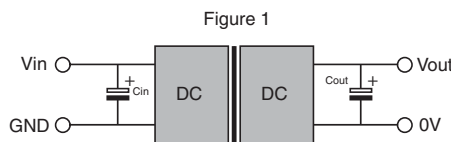


RECOMMENDED CIRCUIT

All the CTDD3220DF-S1.5K-3M Series have been tested according to the following recommended testing circuit before leaving factory. This series should be tested under load. Never be tested under no load (See figure 1 & 2). If you want to further decrease the input/output ripple, you can increase capacitance properly or choose capacitors with low ESR. However, the capacitance should not be too high. (See table 1)

External Capacitor Table (table 1)

V _{in}	C _{in}	C _{out} (0+70°C)	C _{out} (-40+85°C)
5V & 12V	100μF	100μF (electrolytic capacitor)	47μF (tantalum capacitor)
24V & 48V	10μF		



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