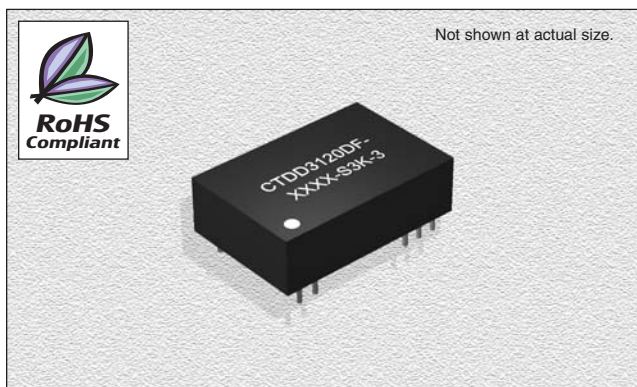


CTDD3120DF-S3K-3 Series

Wide Input Isolated & Regulated 3W Output, Single Output



FEATURES

- Efficiency:** To 83%
- Temperature Range:** -40°C to +85°C
- Isolation:** 3KVDC
- Package:** UL94-V0
- Miscellaneous:** Wide (2:1) Input Range. Single Output. No heat sink required. Industry Standard Pinout. Custom service available. **Samples available.**

CHARACTERISTICS

- Output Short Circuit Protection:** Continuous
- Temperature Rise at Full Load:** 30°C (Typ.)
- Cooling:** Free air convection
- No Load, Power Consumption:** 100mW (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)	Vin Max.* (VDC)	Vout (VDC)	Iout Max. (mA)	Iout Min. (mA)	Effi. Typ. (%)
CTDD3120DF-0505-S3K-2W5	5	4.5-9	11	5	500	50	74
CTDD3120DF-0509-S3K-3	5	4.5-9	11	9	330	33	75
CTDD3120DF-0512-S3K-3	5	4.5-9	11	12	250	25	76
CTDD3120DF-0515-S3K-3	5	4.5-9	11	15	200	20	78
CTDD3120DF-1205-S3K-2W5	12	9-18	22	5	500	50	78
CTDD3120DF-1209-S3K-3	12	9-18	22	9	330	33	79
CTDD3120DF-1212-S3K-3	12	9-18	22	12	250	25	80
CTDD3120DF-1215-S3K-3	12	9-18	22	15	200	20	81
CTDD3120DF-1505-S3K-2W5	15	12-24	30	5	500	50	77
CTDD3120DF-1509-S3K-3	15	12-24	30	9	330	33	80
CTDD3120DF-1512-S3K-3	15	12-24	30	12	250	25	82
CTDD3120DF-1515-S3K-3	15	12-24	30	15	200	20	83
CTDD3120DF-2405-S3K-2W5	24	18-36	40	5	500	50	78
CTDD3120DF-2409-S3K-3	24	18-36	40	9	330	33	82
CTDD3120DF-2412-S3K-3	24	18-36	40	12	250	25	82
CTDD3120DF-2415-S3K-3	24	18-36	40	15	200	20	83
CTDD3120DF-4805-S3K-2W5	48	36-72	80	5	500	50	78
CTDD3120DF-4809-S3K-3	48	36-72	80	9	330	33	82
CTDD3120DF-4812-S3K-3	48	36-72	80	12	250	25	82
CTDD3120DF-4815-S3K-3	48	36-72	80	15	200	20	83

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

ISOLATION SPECIFICATIONS

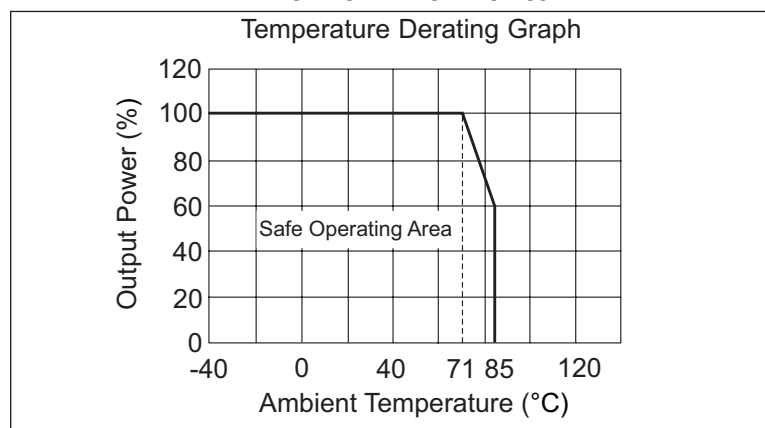
Item	Test Condition	MIN	TYP	MAX	Units
Isolation Voltage	Flash tested for 1 minute	3000			VDC
Isolation Resistance	Test at 500VDC	1000			MΩ

OUTPUT SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
3W Output Power		0.3		3	W
Output voltage accuracy	Refer to Recommended Circuit		±1	±3	%
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		30	60	mVp-p
Noise	DC-20MHz Bandwidth		80	150	mVp-p
Switching frequency	100% load, nominal input voltage	80		200	KHz
Switching frequency	10% load, nominal input voltage	250		600	KHz

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

TYPICAL CHARACTERISTICS

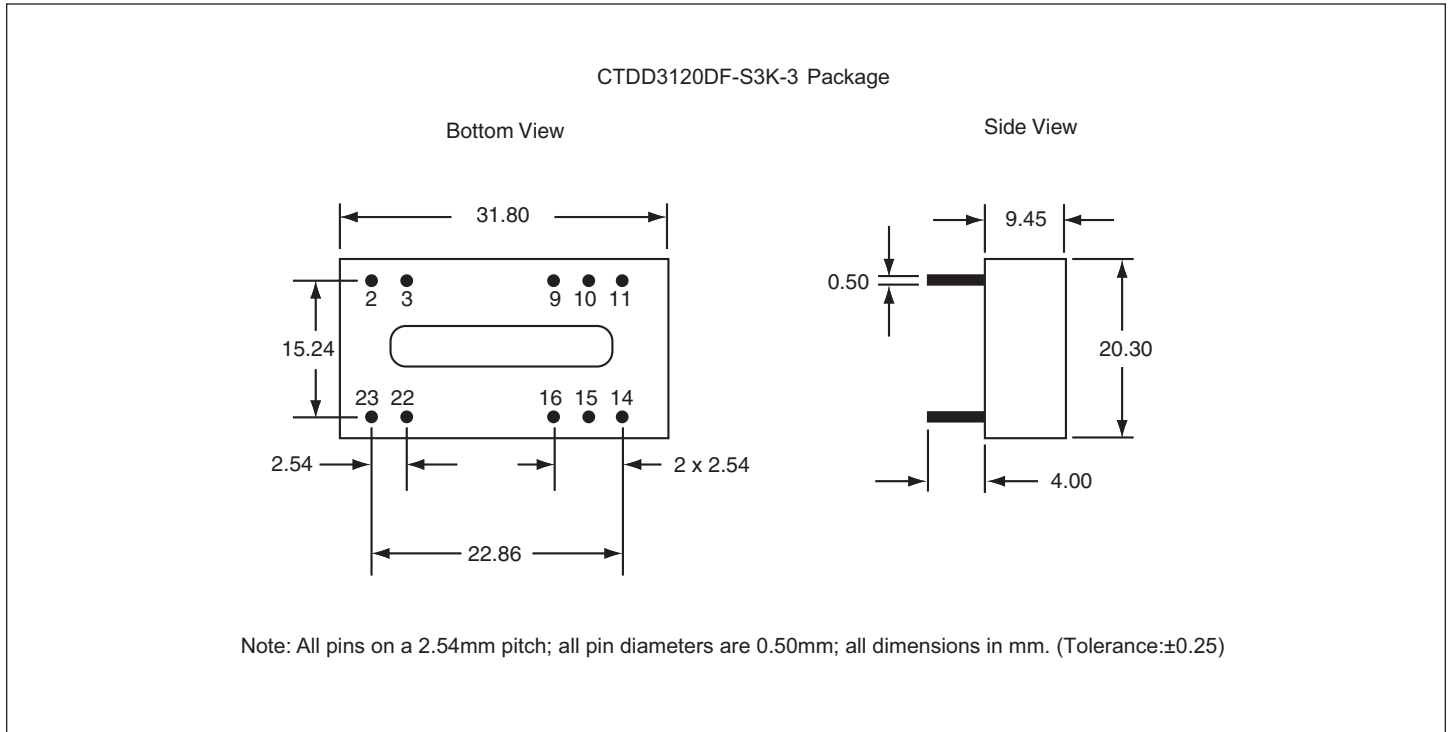


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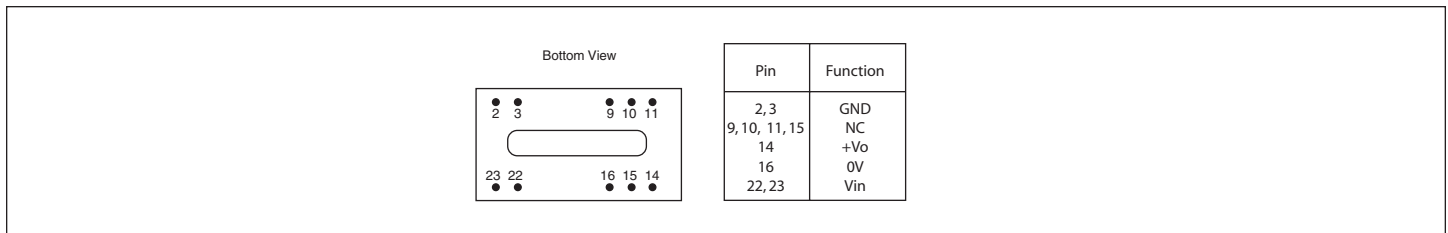
CTDD3120DF-S3K-3 Series

Wide Input Isolated & Regulated
3W Output, Single Output

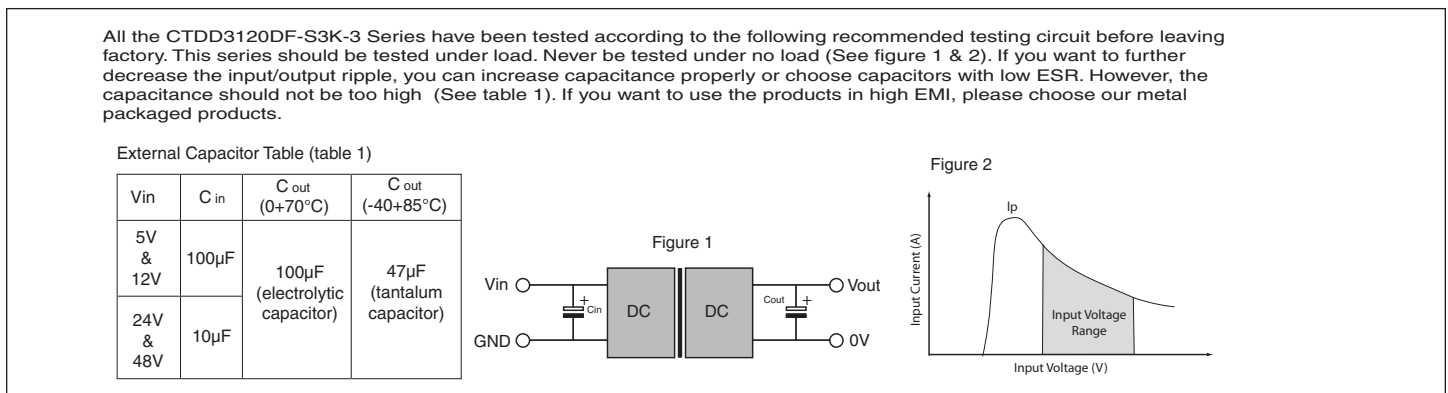
OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



PIN CONNECTIONS



RECOMMENDED CIRCUIT



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