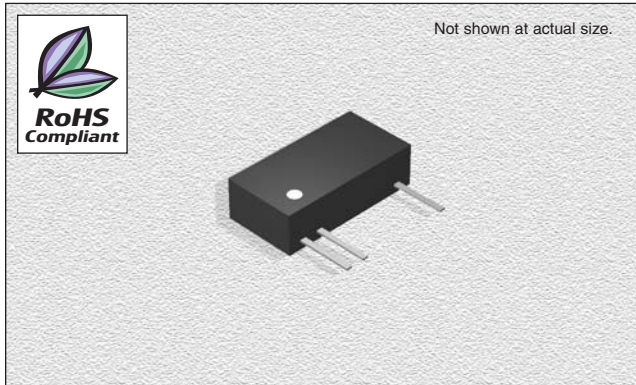


## CTDD1906SF-S-1 Series

### Wide Input Regulated & Non-Isolated 1W Output, Single Output



### FEATURES

- Efficiency:** To 85%
- Temperature Range:** -20°C to +71°C
- Package:** UL94-V0
- Miscellaneous:** Wide (2:1) Input Range. No heat sink required. Industry standard pinout. Single Output 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:** 500mW (typical)
- Operating Temperature Range:** -20°C to +71°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:** >1,000,000 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. (%)
CTDD1906SF-0305-S-1	3.3	2.7-5.4	5.4	5	200	22	79
CTDD1906SF-0309-S-1	3.3	2.7-5.4	5.4	9	110	11	82
CTDD1906SF-0312-S-1	3.3	2.7-5.4	5.4	12	83	9	84
CTDD1906SF-0505-S-1	5	3.6-7.2	7.2	5	200	20	85
CTDD1906SF-0512-S-1	5	3.6-7.2	7.2	12	83	9	87
CTDD1906SF-0515-S-1	5	3.6-7.2	7.2	15	67	7	88
CTDD1906SF-0524-S-1	5	3.6-7.2	7.2	24	42	5	85
CTDD1906SF-0705-S-1	7.2	6.4-8.4	10	5	200	20	84
CTDD1906SF-0709-S-1	7.2	6.4-8.4	10	9	110	11	82
CTDD1906SF-0712-S-1	7.2	6.4-8.4	10	12	83	9	85
CTDD1906SF-0715-S-1	7.2	6.4-8.4	10	15	67	7	86
CTDD1906SF-0724-S-1	7.2	6.4-8.4	10	24	42	5	85
CTDD1906SF-1203-S-1	12	9.0-12.5	12.5	3	300	30	82
CTDD1906SF-1205-S-1	12	9.0-12.5	12.5	5	200	20	86

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

### ISOLATION SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
Isolation Voltage	Tested for 1 minute	0			VDC
Isolation Resistance	Test at 500VDC	0			MΩ

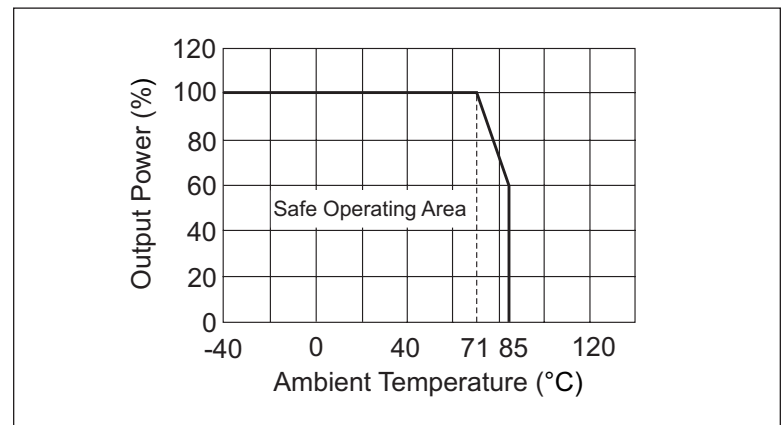
### OUTPUT SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
1W Output Power		0.1		1	W
No load current			1	5	mA
Output voltage accuracy	See tolerance envelope graph			±3	%
Load regulation	From 25% to 100% load			±0.2	%
Line regulation	Input Voltage from low to high			±0.2	%
Temperature drift (Vout)	See tolerance envelope graph			0.02	%/°C
Ripple	20Hz to 300kHz Bandwidth		100	300	mVp-p
Switching frequency	100% load, nominal input voltage	80		400	KHz

Note:

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

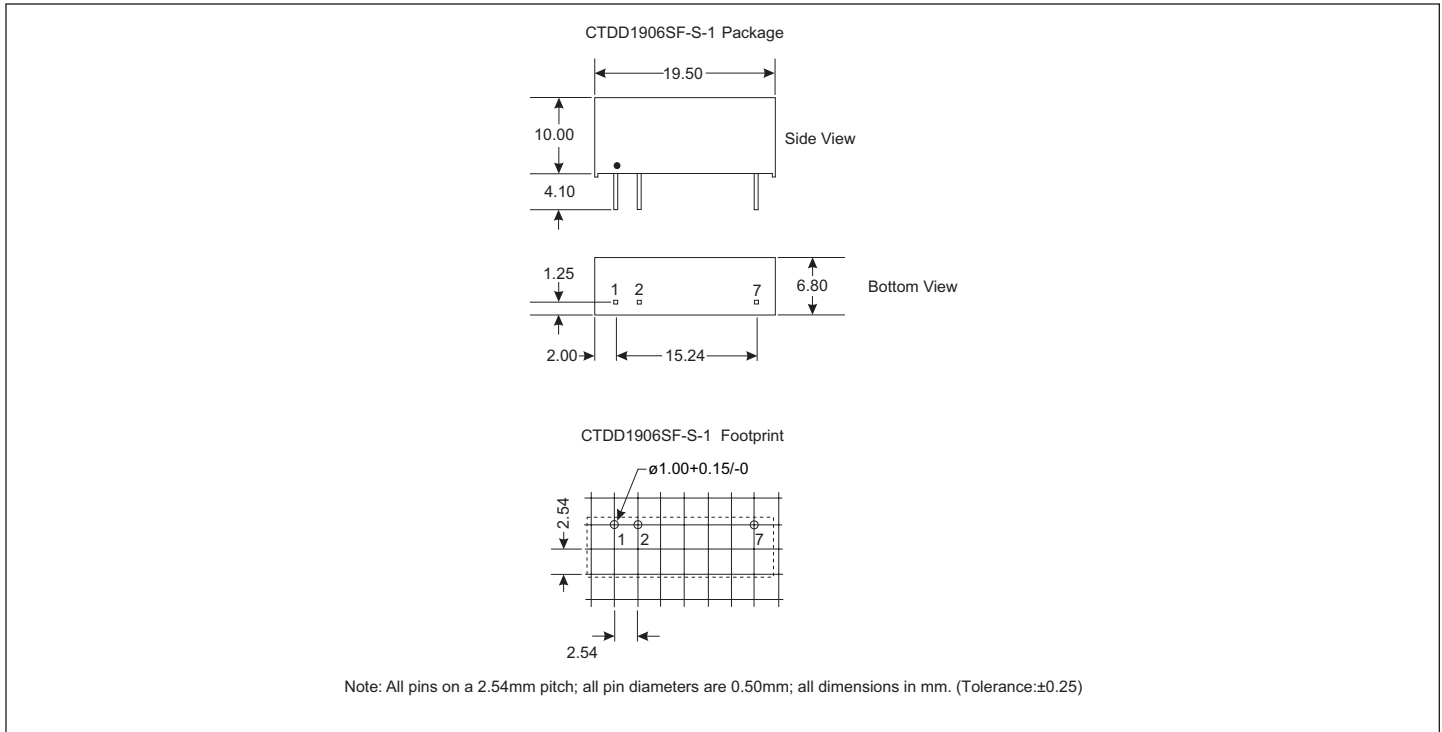
### TYPICAL CHARACTERISTICS



## CTDD1906SF-S-1 Series

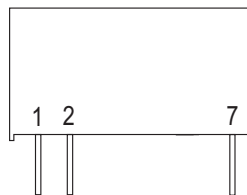
Wide Input Regulated & Non-Isolated  
1W Output, Single Output

### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



### PIN CONNECTIONS

Pin	Function
1	V <sub>in</sub>
2	COM
7	V <sub>o</sub>



11.21.06