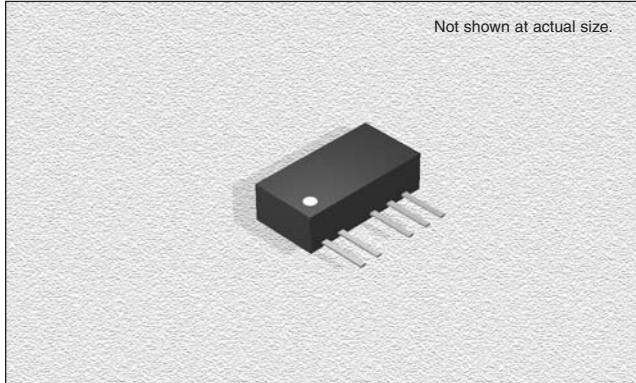


## CTDD1605S-D Series

Fixed Input Isolated & Unregulated  
1W Output, Dual Output



### FEATURES

- Efficiency:** To 85%
- Temperature Range:** -40°C to 85°C
- Isolation:** 1KVDC
- Power Density:** 0.85W/cm<sup>3</sup>
- Package:** UL94-V0
- Miscellaneous:** No heatsink required. No external components required. Industry standard pinout. Positive & Negative Voltage Output. 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:** >1,000,000 hours

### SPECIFICATIONS

Part Number	Vin Nom.	Input Range	Vout	Iout Max. (mA)	Iout Min. (mA)	Effi(Typ.)
CTDD1605S-0505D-1	5VDC	4.5-5.5VDC	±5VDC	100	10	72%
CTDD1605S-0509D-1	5VDC	4.5-5.5VDC	±9VDC	56	6	75%
CTDD1605S-0512D-1	5VDC	4.5-5.5VDC	±12VDC	42	5	78%
CTDD1605S-0515D-1	5VDC	4.5-5.5VDC	±15VDC	33	4	78%
CTDD1605S-1205D-1	12VDC	10.8-13.2VDC	±5VDC	100	10	74%
CTDD1605S-1209D-1	12VDC	10.8-13.2VDC	±9VDC	56	6	75%
CTDD1605S-1212D-1	12VDC	10.8-13.2VDC	±12VDC	42	5	79%
CTDD1605S-1215D-1	12VDC	10.8-13.2VDC	±15VDC	33	4	79%
CTDD1605S-2405D-1	24VDC	21.6-26.4VDC	±5VDC	100	10	71%
CTDD1605S-2409D-1	24VDC	21.6-26.4VDC	±9VDC	56	6	76%
CTDD1605S-2412D-1	24VDC	21.6-26.4VDC	±12VDC	42	5	79%
CTDD1605S-2415D-1	24VDC	21.6-26.4VDC	±15VDC	33	4	80%

### ISOLATION SPECIFICATIONS

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

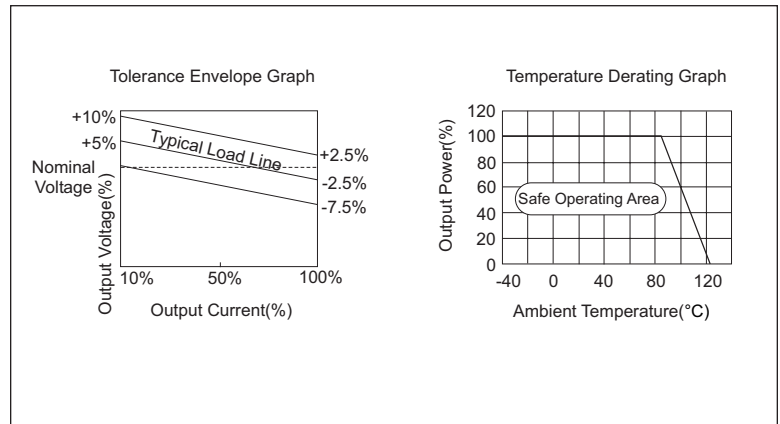
### OUTPUT SPECIFICATIONS

Item	Test Condition	MIN	TYP	MAX	Units
Output Power		0.1		1	W
Line regulation	For Vin change of 1%			1.2	%
Load regulation	10% to 100% full load		10	15	%
Output voltage accuracy	See tolerance envelope graph				
Temperature drift	100% full load			0.03	%/°C
Output ripple	20MHz Bandwidth		50	75	mVp-p
Switching frequency	Full load, nominal input	100	150	200	KHz

Note:

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

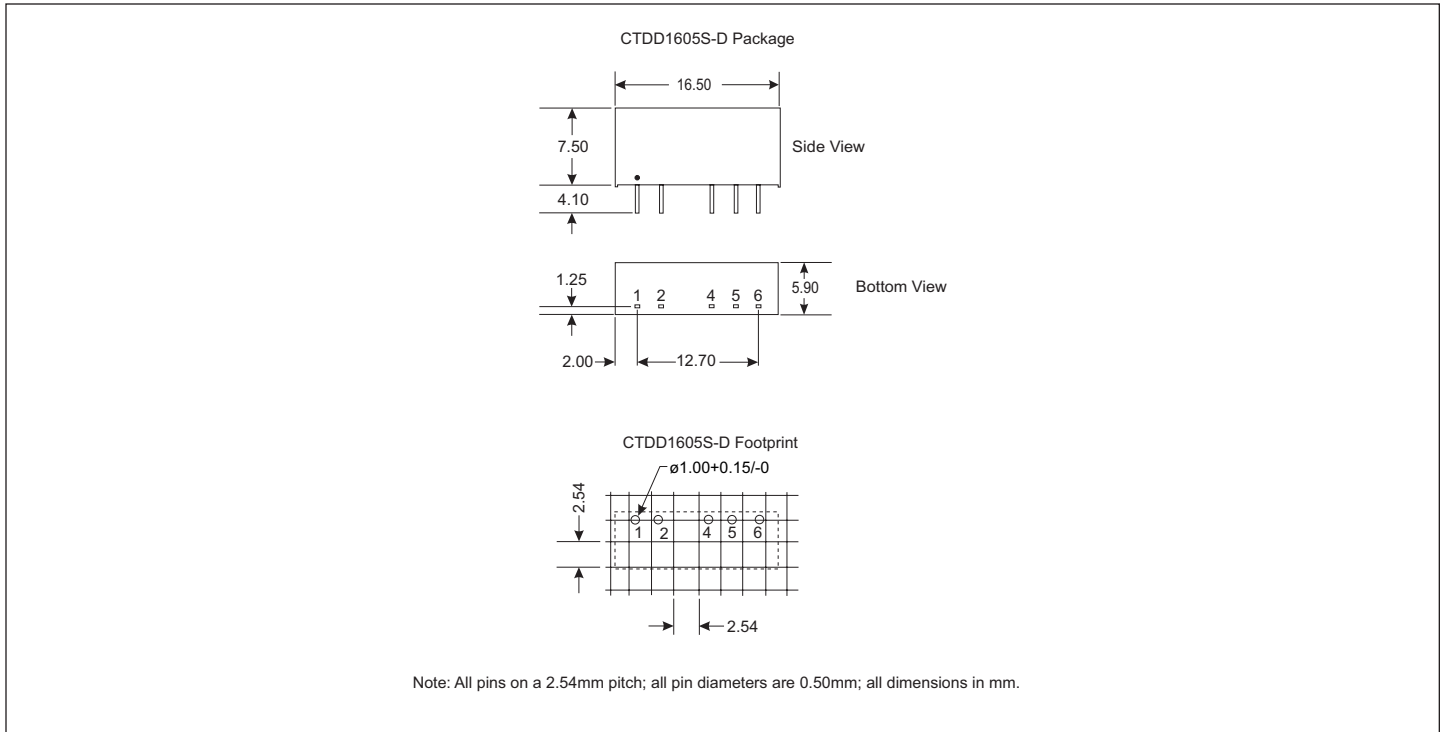
### TYPICAL CHARACTERISTICS



## CTDD1605S-D Series

Fixed Input Isolated & Unregulated  
1W Output, Dual Output

### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



### PIN CONNECTIONS

Pin	Function
1	V <sub>in</sub>
2	GND
4	-V <sub>o</sub>
5	0V
6	+V <sub>o</sub>



12.08.04