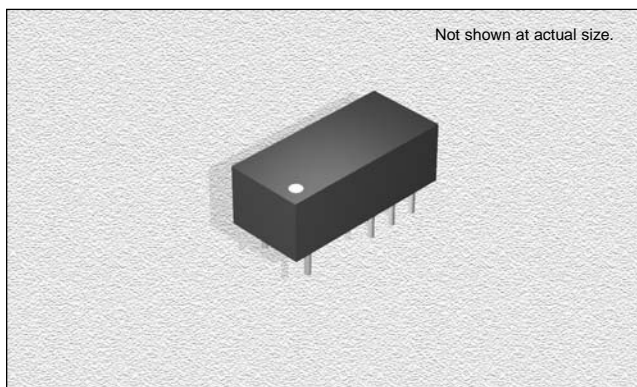


# CTDD2210D-S Series

Fixed Input Isolated & Unregulated  
1W Output, Single Output



## FEATURES

**Efficiency:** 70%-80%  
**Isolation Voltage<sup>3</sup>:** 1000 VDC min  
**Isolation Resistance:** 10<sup>9</sup> ohms min  
**Isolation Capacitance:** 80pF max.  
**Switching Frequency:** 50kHz min  
**MTBF<sup>5</sup>:** >2,000,000 hours  
**Weight:** 3.1g Typ.  
**Case Material:** Non-Conductive Plastic  
**Case Size:** 22.6mm x 9.9mm x 8.4mm  
**Conducted Emissions:** EN55022 Class A  
**Radiated Emissions:** EN55022 Class A

## ENVIRONMENTAL SPECIFICATIONS

**Operating Temperature:** -25°C to +71°C  
**Storage Temperature:** -55°C to +125°C  
**Humidity:** 95% max  
**Cooling:** Free-Air Convection

<sup>1</sup> High Line to Low Line.

<sup>2</sup> Load Regulation is for output load current change from 20% to 100%

<sup>3</sup> For 10 seconds

<sup>4</sup> 25% Step Load Change

<sup>5</sup> MIL-HDBK-217 @25°C, Ground Benign

## SPECIFICATIONS

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Input Curr. <sup>8</sup> Full Load (mA)	Input Curr. <sup>8</sup> No Load (mA)	Eff <sup>9</sup> (%)
CTDD2210D-0503S-1	5	3.3	300	274	21	73
CTDD2210D-0505S-1	5	5	200	274	21	73
CTDD2210D-0509S-1	5	9	111	268	20	75
CTDD2210D-0512S-1	5	12	84	255	20	78
CTDD2210D-0515S-1	5	15	67	253	20	79
CTDD2210D-0524S-1	5	24	42	253	20	79
CTDD2210D-1203S-1	12	3.3	300	112	11	74
CTDD2210D-1205S-1	12	5	200	112	11	74
CTDD2210D-1209S-1	12	9	111	105	10	79
CTDD2210D-1212S-1	12	12	84	102	10	82
CTDD2210D-1215S-1	12	15	67	102	10	82
CTDD2210D-1224S-1	12	24	42	102	10	82
CTDD2210D-2403S-1	24	3.3	300	58	10	72
CTDD2210D-2405S-1	24	5	200	58	10	72
CTDD2210D-2409S-1	24	9	111	52	6	80
CTDD2210D-2412S-1	24	12	84	50	5	83
CTDD2210D-2415S-1	24	15	67	50	5	83
CTDD2210D-2424S-1	24	24	42	50	5	83
CTDD2210D-4803S-1	48	3.3	300	28	3	74
CTDD2210D-4805S-1	48	5	200	28	3	74
CTDD2210D-4809S-1	48	9	111	27	3	77
CTDD2210D-4812S-1	48	12	84	25	3	83
CTDD2210D-4815S-1	48	15	67	25	2	83
CTDD2210D-4824S-1	48	24	42	25	2	83

<sup>8</sup> Nominal Input Voltage

<sup>9</sup> Nominal Input Voltage, Full Load

## INPUT SPECIFICATIONS

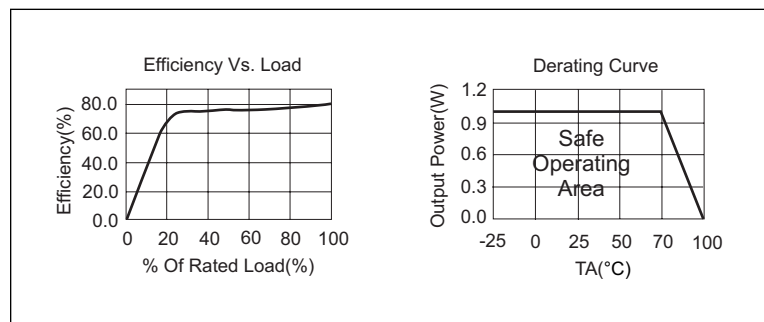
**Input Voltage Range:** ±10% max  
**Input Filter:** Capacitor Typ  
**Protection:** Fuse Recommended

## OUTPUT SPECIFICATIONS

**Output Power:** 1W  
**Voltage Setpoint Accuracy:** ±2% max  
**Temperature Coefficient:** ±0.03%/°C  
**Ripple & Noise(20MHz BW):** 100mVp-p max  
**Line Regulation<sup>1</sup>:** ±1.2% max  
**Load Regulation<sup>2</sup>:** ±8% max  
**Minimum Load:** 10% of Full Load  
**Short Circuit Protection:** Momentary  
**Transient Response<sup>4</sup>:** 200uS max

All specifications typical at nominal line, full load, and 25°C unless otherwise noted.

## TYPICAL CHARACTERISTICS

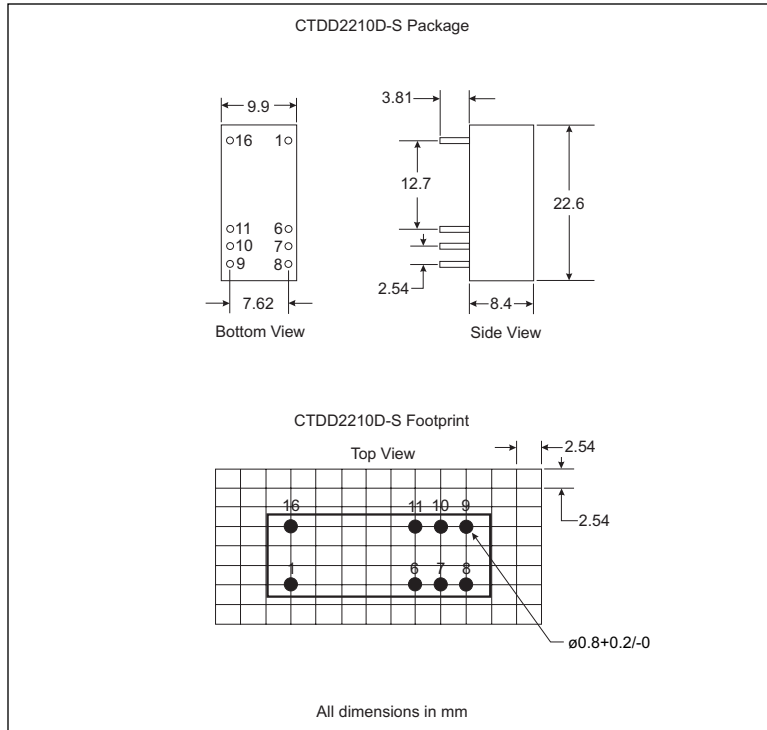


02.16.05

## CTDD2210D-S Series

Fixed Input Isolated & Unregulated  
1W Output, Single Output

### OUTLINE DIMENSIONS & RECOMMENDED FOOTPRINT DETAILS



### PIN CONNECTIONS

Pin	Function
1&16	+Vin
6&11	-Vout
7&10	+Vout
8&9	-Vin

Pin connection diagram showing the layout of pins 1, 6, 7, 8, 9, 10, 11, and 16. The pins are arranged in two rows: the top row contains pins 16 and 1, and the bottom row contains pins 11, 6, 10, 7, 9, and 8.

02.16.05