



**TRUMPower**  
DC/DC CONVERTERS



**TAL Series**  
2:1 Input, 1.5-3 Watt

OUTPUT VOLTAGE	OUTPUT CURRENT	*OUTPUT POWER	*MODEL NUMBER		
			9-18 VDC IN	18-36 VDC IN	36-72 VDC IN
5 VDC	600 mA	3W	TAL-3S1205	TAL-3S2405	TAL-3S4805
12 VDC	250 mA	3W	TAL-3S1212	TAL-3S2412	TAL-3S4812
15 VDC	200 mA	3W	TAL-3S1215	TAL-3S2415	TAL-3S4815
24 VDC	125 mA	3W	TAL-3S1224	TAL-3S2424	TAL-3S4824
±5 VDC	±300 mA	3W	TAL-3D1205	TAL-3D2405	TAL-3D4805
±12 VDC	±125 mA	3W	TAL-3D1212	TAL-3D2412	TAL-3D4812
±15 VDC	±100 mA	3W	TAL-3D1215	TAL-3D2415	TAL-3D4815
±24 VDC	±63 mA	3W	TAL-3D1224	TAL-3D2424	TAL-3D4824

Other outputs also available.

\*Specify TAL-1xxxxx for 1.5W version, and TAL-2xxxxx for 2W version.

\*Add suffix "H" for 3.5KV isolation.

### ELECTRICAL SPECIFICATIONS

All Specifications Typical @+25°C, Nominal Line, and Full Load Unless Otherwise Noted.

#### INPUT SPECIFICATIONS

Input Voltage.....See Table  
Nominal Input.....12, 24, 48 VDC  
Input Filter.....Pi Network

#### OUTPUT SPECIFICATIONS

Voltage Accuracy.....±1%, Max.  
Voltage Balance, Dual Outputs.....±1%, Max.  
Line Regulation.....±0.5%, Max.  
Load Regulation, 10%FL-FL.....±0.5%, Max.  
Ripple and Noise, 20MHz BW.....60 mVp-p, Max.  
Short Circuit Protection.....Continuous  
Temperature Coefficient.....±0.02%/C, Max.

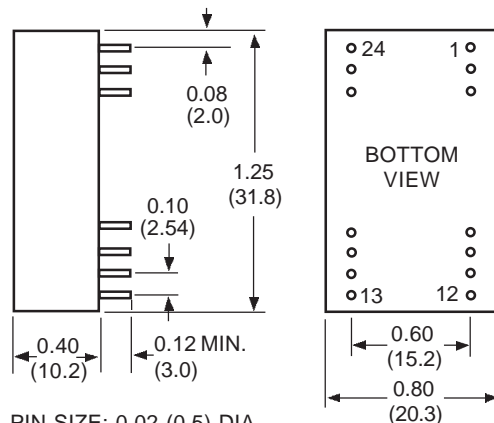
#### GENERAL SPECIFICATIONS

Efficiency.....75 - 85%  
Isolation Voltage, Input to Output.....1,500 VDC, Standard  
3,500 VDC, Suffix "H"  
Isolation Resistance.....10<sup>9</sup> Ohms, Min.  
Switching Frequency.....250 kHz  
Operating Temperature, No Derating.....-25°C to +71°C  
Storage Temperature Range.....-40°C to +125°C  
Cooling.....Free Air Convection  
MTBF per MIL-HDBK-217F @25°C.....>1,000k Hours  
Weight.....0.5 oz. (14 grams)  
Case Material.....Non-Conductive Black Plastic  
Metal Case Available Upon Request

STANDARD MODELS (1.5KV ISOLATION)		
PIN #	SINGLE	DUAL
1,24	+V Input	+V Input
2,23	*NC	-V Output
3,22	*NC	Common
10,15	-V Output	Common
11,14	+V Output	+V Output
12,13	-V Input	-V Input
No pin on other locations.		

\*NC: No Connection

SUFFIX "H" MODELS (3.5KV ISOLATION)		
PIN #	SINGLE	DUAL
2,3	-V Input	-V Input
9	No Pin	Common
11	*NC	-V Output
14	+V Output	+V Output
16	-V Output	Common
22,23	+V Input	+V Input
No pin on other locations.		



PIN SIZE: 0.02 (0.5) DIA.

ALL DIMENSIONS IN INCHES (mm)

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