



TRUMPower

DC/DC CONVERTERS

TSAA Series

2:1 Input, 8-pin SIP, 1-2 Watts

OUTPUT VOLTAGE	OUTPUT CURRENT	*OUTPUT POWER	*MODEL NUMBER			
			4.5-9 VDC IN	9-18 VDC IN	18-36 VDC IN	36-72 VDC IN
3.3 VDC	303 mA	1W	TSAA-1S053.3	TSAA-1S123.3	TSAA-1S243.3	TSAA-1S483.3
5 VDC	200 mA	1W	TSAA-1S0505	TSAA-1S1205	TSAA-1S2405	TSAA-1S4805
12 VDC	83 mA	1W	TSAA-1S0512	TSAA-1S1212	TSAA-1S2412	TSAA-1S4812
15 VDC	67 mA	1W	TSAA-1S0515	TSAA-1S1215	TSAA-1S2415	TSAA-1S4815
24 VDC	42 mA	1W	TSAA-1S0524	TSAA-1S1224	TSAA-1S2424	TSAA-1S4824
±3.3 VDC	±151 mA	1W	TSAA-1D053.3	TSAA-1D123.3	TSAA-1D243.3	TSAA-1D483.3
±5 VDC	±100 mA	1W	TSAA-1D0505	TSAA-1D1205	TSAA-1D2405	TSAA-1D4805
±12 VDC	±42 mA	1W	TSAA-1D0512	TSAA-1D1212	TSAA-1D2412	TSAA-1D4812
±15 VDC	±34 mA	1W	TSAA-1D0515	TSAA-1D1215	TSAA-1D2415	TSAA-1D4815
±24 VDC	±21 mA	1W	TSAA-1D0524	TSAA-1D1224	TSAA-1D2424	TSAA-1D4824

Other input and output combinations available.

*For 2W version, specify TSAA-2XXXXX, i.e. TSAA-2S2405, etc.

ELECTRICAL SPECIFICATIONS

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

INPUT SPECIFICATIONS

Input Voltage.....See Table
 Nominal Input.....5, 12, 24, 48 VDC
 Input Filter.....Capacitor

ISOLATION SPECIFICATIONS

Isolation Voltage, Input to Output.....1,000 VDC, Standard
 3,000 VDC, Suffix "H"
 Resistance.....1,000M Ω, Min.
 Capacitance.....60 pF, Typ.

OUTPUT SPECIFICATIONS

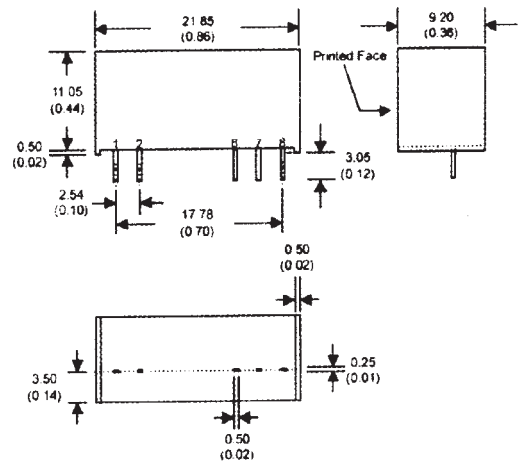
Voltage Accuracy.....±2%, Max.
 Ripple and Noise (at 20 MHz BW).....50 mVp-p, Max.
 Short Circuit Protection.....Continuous
 Short Circuit Restart.....Automatic
 Line Voltage Regulation.....±0.5%, Max.
 Load Voltage Regulation, 25% - 100% Load.....±1%, Max.
 Remote On/Off Control (Optional).....Add Suffix "R"
 Temperature Coefficient.....±0.02%/°C
 Capacitive Load.....Contact Factory

OTHER SPECIFICATIONS

Efficiency.....62% to 80%
 Switching Frequency.....100 to 650 KHz
 Operating Temperature.....-25°C to +85°C
 Case Temperature.....95°C, Max.
 Storage Temperature.....-40°C to +125°C
 Cooling.....Free-air Convection
 Derating.....Not Required

PIN CONNECTIONS		
PIN	SINGLE OUTPUT	DUAL OUTPUT
1	-V Input	-V Input
2	+V Input	+V Input
3	*NP/RC (Optional)	NC/RC (Optional)
5	*NP/NC	NC
6	+V Output	+V Output
7	-V Output	-V Output
8	NC	Common

*On standard single output models, No Pin (NP) at pins #3 and #5; When the optional Remote On/Off Control (RC) is present, pin #5 is NC (No Connection).



Pin Size: 0.02 X 0.01 inch

All dimensions in millimeters (inches).