



TRUMPower

DC/DC CONVERTERS

TC8-R Series

2:1 Input, 12.5 to 20 Watt

| OUTPUT VOLTAGE | OUTPUT CURRENT | OUTPUT POWER | MODEL NUMBER | |
|----------------|----------------|--------------|---------------|---------------|
| | | | 18-36 VDC IN | 36-72 VDC IN |
| 2.5 VDC | 5A | 12.5W | TC8-13S242.5R | TC8-13S482.5R |
| 3.3 VDC | 5A | 16.5W | TC8-17S243.3R | TC8-17S483.3R |
| 5 VDC | 4A | 20W | TC8-20S2405R | TC8-20S4805R |

Other input/output combinations available.

ELECTRICAL SPECIFICATIONS

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

INPUT SPECIFICATIONS

Nominal Line, 18-36V Input.....24 VDC
 36-72V Input.....48 VDC
 Input Filter.....Pi Filter

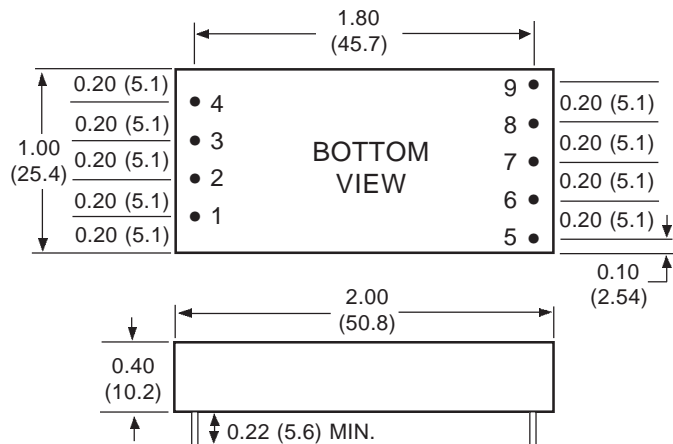
OUTPUT SPECIFICATIONS

Voltage Accuracy.....±1%, Max.
 Line Regulation, HL-LL.....±0.2%, Max.
 Load Regulation, FL-25%FL.....±1.0%, Max.
 Ripple and Noise, 20MHz BW.....75mVp-p, Max.
 Minimum Load.....10%
 Short Circuit Protection.....Continuous
 Current Limit Threshold.....110-140%
 Output Adjustment Range.....±10%

GENERAL SPECIFICATIONS

Efficiency.....81% - 86%
 Isolation Voltage, Input to Output.....500 VDC, Min.
 Switching Frequency.....500 kHz, Min.
 Operating Temperature Range.....-25°C to +71°C
 Storage Temperature Range.....-40°C to +100°C
 Case Temperature.....+100°C, Max.
 Cooling.....Free Air Convection
 EMI/RFI.....Six-Sided Continuous Shield
 Case Material.....Black Coated Copper with
 Non-Conductive Base

| PIN CONNECTIONS | |
|-----------------|---------------|
| PIN | FUNCTION |
| 1 | Remote On/Off |
| 2 | No Pin |
| 3 | -Vin |
| 4 | +Vin |
| 5 | Trim |
| 6 | No Pin |
| 7 | -Vout |
| 8 | No Pin |
| 9 | +Vout |



PIN SIZE: 0.04 INCH (1.0 mm) DIA.
 ALL DIMENSIONS IN INCHES (mm)

| REMOTE ON/OFF CONTROL | |
|-----------------------|----------------------------|
| Logic Compatibility | CMOS or Open Collector TTL |
| Ec-ON | >+5.5 VDC or Open Circuit |
| Ec-OFF | <1.8 VDC |
| Control Common | Referenced to Input Minus |