

# 10 to 12 WATT SINGLE and DUAL OUTPUT DC-DC CONVERTERS

## TP500 SERIES

### Features:

- Regulated Outputs
- Pi Input Filter
- Six-Sided Shield (Optional)
- Short Circuit Protection



### Specifications:

#### Input

Input Voltage Range :  $\pm 10\%$  or 2:1 Input "W2" Option Except 5V Input = 4.5-6.0V  
Input Filter : Pi Network

#### Output

Voltage/Current Rating : See Order Information Table  
Voltage Tolerance :  $\pm 1.0\%$  (max)  
Line Regulation : 0.05% (typ)  
Load Regulation : 0.1% (typ)  
Ripple and Noise : 50mV (max) p-p (Single Output)  
: 35mV (max) p-p (Dual Output)  
Dielectric Withstand : 500VDC (min)  
Isolation Resistance :  $10^9$  ohms  
Isolation Capacitance : 100pF  
Efficiency : 65-70%  
Switching Frequency : 50KHz  
Output Protection : Short Circuit Protection  
: Over Voltage Protection

#### Environmental

Operating Temperature :  $-25^{\circ}\text{C}$  to  $71^{\circ}\text{C}$   
Storage Temperature :  $-40^{\circ}\text{C}$  to  $100^{\circ}\text{C}$   
Temperature Coefficient :  $\pm 0.02\%/^{\circ}\text{C}$  (Single Output)  
:  $\pm 0.01\%/^{\circ}\text{C}$  (Dual Output)

#### Mechanical

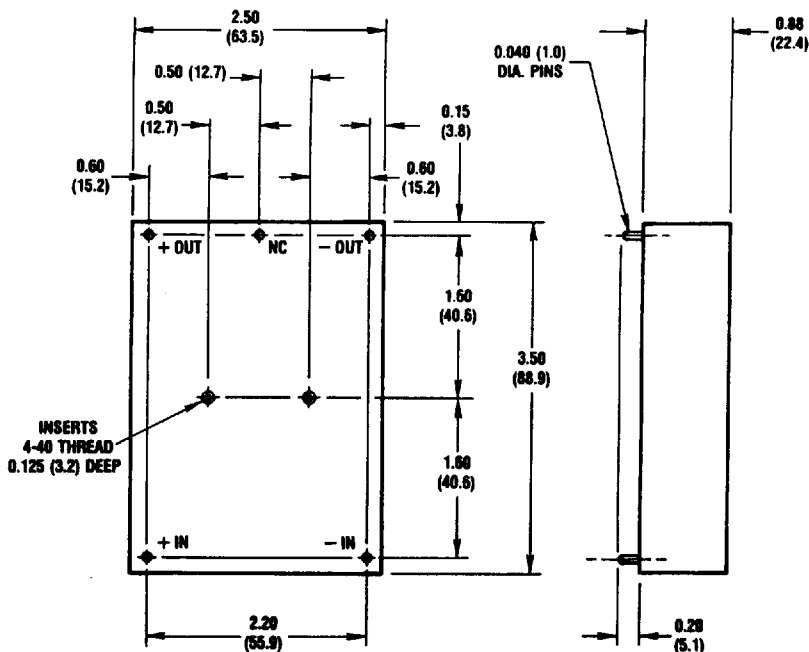
Case Material : Plastic  
: Add Suffix "M" for Copper Case  
with Non-Conductive Base

**ORDER INFORMATION TABLE**

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT	
				NO LOAD	FULL LOAD
TP501	5 VDC	5 VDC	2000mA	60mA	3340mA
TP502		12 VDC	940mA	80mA	3500mA
TP503		15 VDC	800mA	100mA	3670mA
TP504		±12 VDC	±525mA	130mA	3840mA
TP505		±15 VDC	±412mA	180mA	3780mA
TP506	12 VDC	5 VDC	2000mA	30mA	1400mA
TP507		12 VDC	940mA	40mA	1450mA
TP508		15 VDC	800mA	50mA	1540mA
TP509		±12 VDC	±525mA	80mA	1600mA
TP510		±15VDC	±412mA	90mA	1570mA
TP511	24 VDC	5 VDC	2000mA	20mA	700mA
TP512		12 VDC	940mA	25mA	700mA
TP513		15 VDC	800mA	25mA	730mA
TP514		±12 VDC	±525mA	50mA	780mA
TP515		±15 VDC	±412mA	50mA	760mA
TP516	28 VDC	5 VDC	2000mA	20mA	600mA
TP517		12 VDC	940mA	25mA	590mA
TP518		15 VDC	800mA	30mA	620mA
TP519		±12 VDC	±525mA	50mA	650mA
TP520		±15 VDC	±412mA	50mA	650mA
TP521	48 VDC	5 VDC	2000mA	20mA	350mA
TP522		12 VDC	940mA	25mA	350mA
TP523		15 VDC	800mA	25mA	360mA
TP524		±12 VDC	±525mA	30mA	390mA
TP525		±15 VDC	±412mA	40mA	380mA

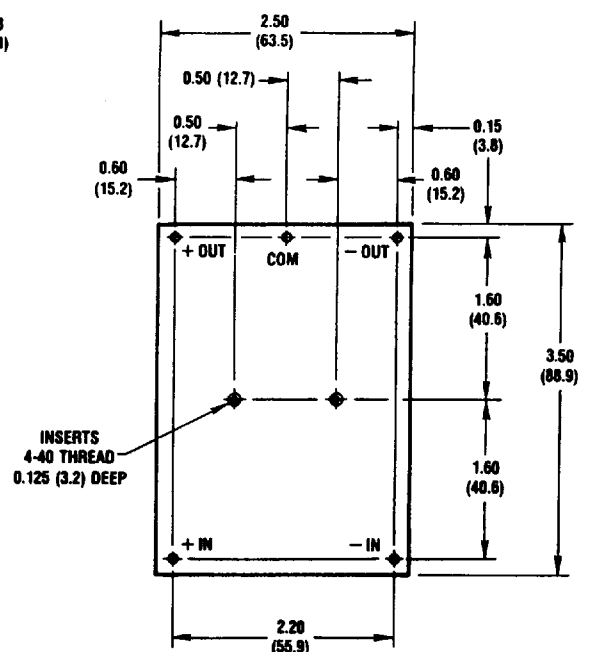
Note: To order wide input, add suffix "W2" to P/N (T501W2, etc.)

**SINGLE OUTPUT MODELS**



Bottom View

**DUAL OUTPUT MODELS**



Bottom View