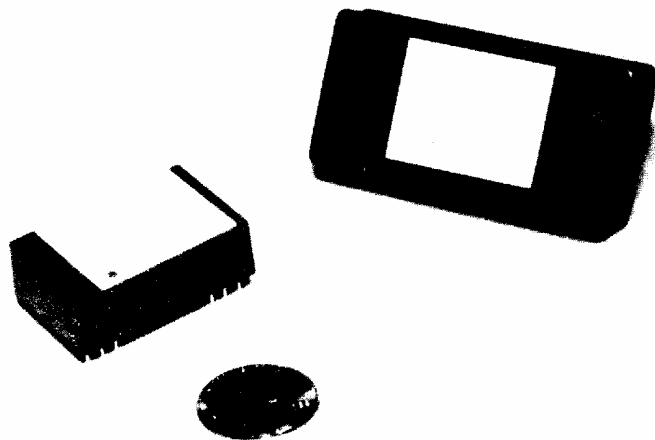


# 1.5 WATT SINGLE and DUAL OUTPUT DC - DC CONVERTERS

## TP200 Series

### Features:

- 50% Efficiency
- Regulated Outputs
- PI Input Filter
- 500 VDC Isolation
- Low Ripple and Noise
- Short Circuit Protection
- Single and Dual Output



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### Specifications:

#### Input

Input Voltage Range :  $\pm 10\%$   
Input Filter : Pi Network

#### Output

Voltage/Current Ratings : See Order Information Table  
Voltage Tolerance :  $\pm 4\%$  (max)  
Line Regulation :  $\pm 0.3\%$  (typ)  
Load Regulation :  $\pm 0.5\%$  (typ)  
Ripple and Noise : 50mV (max) p-p (DC-20MHz)  
Dielectric Withstand : 500VDC (min)  
Isolation Resistance :  $10^9$  ohms  
Isolation Capacitance : 30pF  
Efficiency : Unregulated 70-80%, Regulated 55-70%  
Switching Frequency : 20kHz (min)  
Output Protection : Short Circuit 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 :  $\pm 0.02\%/^{\circ}\text{C}$

#### Mechanical

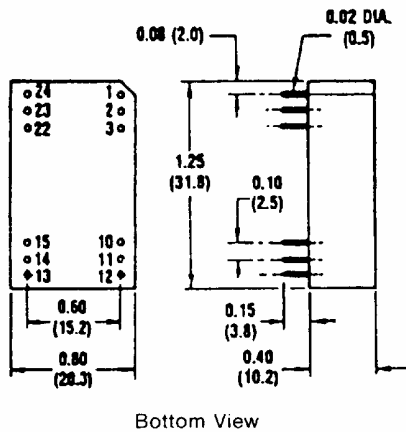
Case Material : Plastic  
: Add Suffix "M" for Copper Case with  
Non-Conductive Base for Case B

**ORDER INFORMATION TABLE**

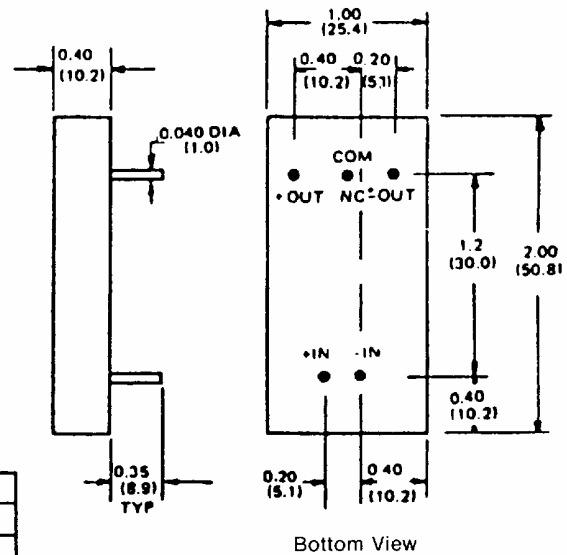
MODEL NUMBER		INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT	
CASE A	CASE B				NO LOAD	FULL LOAD
TP201	TP202	5VDC	5VDC	300mA	100mA	670mA
TP203	TP204		12VDC	125mA	100mA	520mA
TP205	TP206		15VDC	100mA	100mA	500mA
TP207	TP208		±12VDC	±60mA	100mA	530mA
TP209	TP210		±15VDC	±50mA	100mA	560mA
TP211	TP212	12VDC	5VDC	300mA	40mA	270mA
TP213	TP214		12VDC	125mA	40mA	210mA
TP215	TP216		15VDC	100mA	35mA	190mA
TP217	TP218		±12VDC	±60mA	35mA	200mA
TP219	TP220		±15VDC	±50mA	35mA	200mA
TP221	TP222	24VDC	5VDC	300mA	20mA	120mA
TP223	TP224		12VDC	125mA	20mA	100mA
TP225	TP226		15VDC	100mA	20mA	100mA
TP227	TP228		±12VDC	±60mA	20mA	100mA
TP229	TP230		±15VDC	±50mA	20mA	100mA
TP231	TP232	28VDC	5VDC	300mA	15mA	100mA
TP233	TP234		12VDC	125mA	15mA	90mA
TP235	TP236		15VDC	100mA	15mA	90mA
TP237	TP238		±12VDC	±60mA	15mA	90mA
TP239	TP240		±15VDC	±50mA	15mA	90mA
TP241	TP242	48VDC	5VDC	300mA	10mA	70mA
TP243	TP244		12VDC	125mA	10mA	50mA
TP245	TP246		15VDC	100mA	10mA	50mA
TP247	TP248		±12VDC	±60mA	10mA	60mA
TP249	TP250		±15VDC	±50mA	10mA	60mA

Note: To order non-regulated version, add suffix "NR" to PN (TP201NR, etc.)

**Case A**



**Case B**



Pin Connections		
Pin	Single Output	Dual Output
1	+V Input	+V Input
2	NC*	-V Output
3	NC*	Common
10	-V Output	Common
11	+V Output	+V Output
12	-V Input	-V Input
13	-V Input	-V Input
14	+V Output	+V Output
15	-V Output	Common
22	NC*	Common
23	NC*	-V Output
24	+V Input	+V Input

\* Pins may be missing.