



3 WATT SINGLE & DUAL OUTPUT

24-Pin DIP Package
DC/DC Converters



FEATURES

- **4:1 Wide Input Range**
- **500 Vdc Input/
Output Isolation**
- **Efficiency to
72% @ FL**
- **Short Circuit
Protection**
- **Industry Standard
Package and Pinout**
- **No External
Components**

TWB3 Series

Specifications

All specifications are typical at nominal input, full load, and 25°C , unless otherwise noted.

INPUT

Input Voltages.....	Voltage Range
24 Vdc.....	9 - 36 Vdc
48 Vdc.....	18 - 72 Vdc
Input Filter	Pi Network

OUTPUT

Voltage Accuracy.....	±4% max.
Line Regulation.....	±1% max.
Load Regulation.....	+Vdc ±1% max.
	-Vdc ±2.5% max.
Ripple Noise (20MHz Bw).....	150mV p-p max.
Temperature Coefficient (at FL).....	±0.02%/°C max.
Short Circuit Protection.....	Fold Back

GENERAL

Efficiency.....	Up to 72% (See table)
Isolation Voltage.....	500 Vdc min.
Isolation Resistance.....	1000MOhms
Switching Frequency.....	50KHz min.

ENVIRONMENTAL

Operating Temperature Range.....	-20° to +71°C
Storage Temperature Range.....	-40° to +105°C
Derating	None
Cooling.....	Free Air Convection
Humidity.....	20-95% RH Non-Condensing

PHYSICAL

Case Material.....	Non-Conductive Black Plastic
Weight	0.8 oz. (22 grams)
Dimensions.....	1.25" x 0.80" x 0.50"

Selection Guide

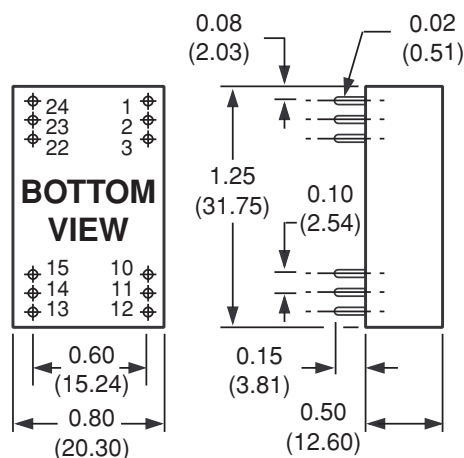
(Continued)

SINGLE OUTPUT VOLTAGE	Input Voltage Nominal (Range) (Vdc)	Output Voltage (Vdc)	Output Current (mA)	Model Number	% Efficiency	Case	
	12 (9-36)	5	500	TWB3-24S5	62	B	
		12	250	TWB3-24S12	62	B	
		15	200	TWB3-24S15	65	B	
	24 (18-72)	5	500	TWB3-48S5	70	B	
		12	250	TWB3-48S12	70	B	
		15	200	TWB3-48S15	70	B	
DUAL OUTPUTS	12 (9-36)	±5	±250	TWB3-24-5	63	B	
		±12	±125	TWB3-24-12	64	B	
		±15	±100	TWB3-24-15	64	B	
	24 (18-72)	±5	±250	TWB3-48-5	61	B	
		±12	±125	TWB3-48-12	68	B	
		±15	±100	TWB3-48-15	72	B	

Mechanical Specifications

I/O Connections		
Pin	SINGLE	DUAL
1	+Vin	+Vin
2	NC	-Vout
3	NC	Common
10	-Vout	Common
11	+Vout	+Vout
12	-Vin	-Vin
13	-Vin	-Vin
14	+Vout	+Vout
15	-Vout	Common
22	NC	Common
23	NC	-Vout
24	+Vin	+Vin

CASE B



All Dimensions are in inches (mm)



POLYTRON DEVICES, Inc.

P.O. Box 398, Paterson, New Jersey 07544 U.S.A.
 Tel: (973)345-5885 Fax: (973)345-1264 • Email: sales@polytrondevices.com • www.polytrondevices.com