

DC/DC Converters

XPiQ inc.

Intelligent Design Quality Product



**20 Watts
WE Series**



- High Density
- Fully Regulated Outputs
- Efficiency to 86%
- Low Voltage Outputs
- Surface Mount Package Option
- 2:1 Input Range

Specification

Input

- *Input Voltage Range* • See Table
- *Input Filter* • π Network

Output

- *Voltage Accuracy* • $\pm 1.0\%$ max
- *External Voltage Trim Range* • $\pm 10\%$
- *Line Regulation (low line to high line)* • $+0.2\%$ max
- *Load Regulation (1/4 to Full Load)* • $+1.0\%$ max
- *Transient Response 25% Step Load Change* • $< 500\mu$ sec.
- *Ripple & Noise (20MHz BW)* • 75mV p-p max
- *Temperature Coefficient* • $\pm 0.02\%/^{\circ}\text{C}$ max
- *Short Circuit Protection* • Continuous
- *Remote On/Off Control:* •
- *Logic Compatibility* • CMOS or Open Collector TTL
- *E_C On* • > 5.5 VDC or Open Circuit
- *E_C Off* • < 1.8 VDC
- *Control Common* • Referenced to -V Input

General

- *Switching Frequency* • 500 kHz typ.
- *Efficiency* • See Table
- *Isolation (Input-Output)* • 500 VDC (1000 Mohm/80pF)

Environmental

- *Operating Temperature* • -25°C to $+71^{\circ}\text{C}$
- *Case Temperature* • 100°C max
- *Storage Temperature* • -40°C to 100°C
- *EMI/RFI* • Six-sided Continuous Shield
- *Case Material* • Black Coated Copper with Non-Conductive Base

OUTPUT VOLTAGE & CURRENT RATINGS

WE

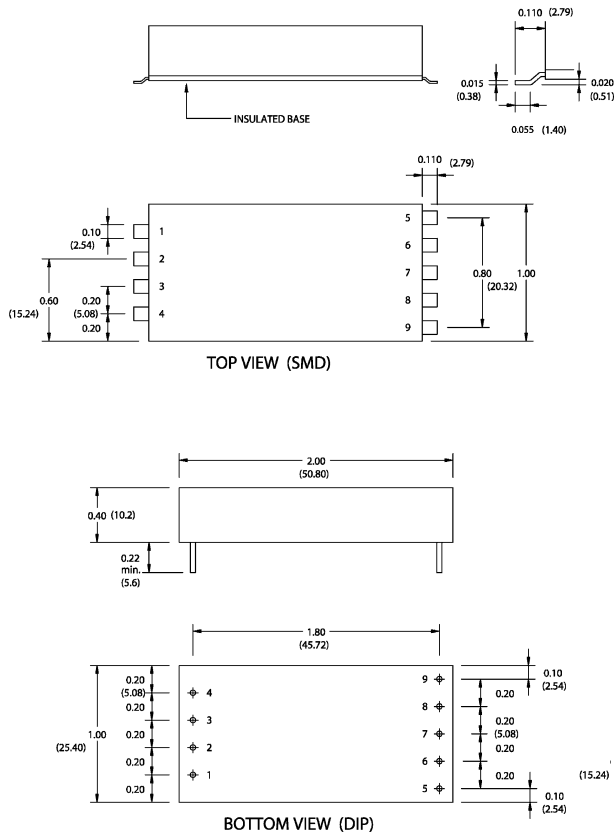
Model	Input Voltage	Output Voltage	Output Current	Input Current		% Efficiency
				No Load	Full Load	
WE320	18-36 VDC	2.5 VDC	5000 mA	30 mA	645 mA	81
WE300	18-36 VDC	3.3VDC	5000 mA	20 mA	828 mA	83
WE301	18-36 VDC	5 VDC	4000 mA	20 mA	992 mA	84
WE420	36-72 VDC	2.5 VDC	5000 mA	25 mA	318 mA	82
WE400	36-72 VDC	3.3 VDC	5000 mA	25 mA	410 mA	84
WE401	36-72 VDC	5 VDC	4000 mA	25 mA	485 mA	86

Notes

Nominal Input Voltage is 24 VDC for WE3XX models and 48VDC for WE4XX models.

For optional SMT version:
Add suffix "M" to part number

Mechanical Details



PIN	THROUGH HOLE PACKAGE	SMT PACKAGE
1	REMOTE ON/OFF	REMOTE ON/OFF
2	NO PIN	NO CONNECT
3	-V INPUT	-V INPUT
4	+V INPUT	+V INPUT
5	TRIM	TRIM
6	NO PIN	NO CONNECT
7	-V OUTPUT	-V OUTPUT
8	NO PIN	NO CONNECT
9	+V OUTPUT	+V OUTPUT

Dimensions in inches (mm)
Specifications subject to change.

