



40 WATT SINGLE/DUAL/TRIPLE OUTPUT

Isolated, Wide Input Range DC/DC Converters



FEATURES

- Ideal for Telecom/
Networking Application
- Miniature
2.0" x 2.0" x 0.4" Case
- 2:1 Input Range
- Efficiency to 90%
- Six-Sided Shield
- On/Off Control
- Over Current
Protection
- Safety Approval
Pending

MWA40-B2ASeries

Specifications

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

INPUT

Voltage Range.....See Chart
 Input Filter.....LC Type
 Undervoltage Shutdown17 or 34Vdc, typ.
 Remote Off Input Current.....2.5mA, typ.

OUTPUT

Voltage Accuracy.....Single/Dual/Triple Primary ±1.0%
Triple (Aux.) Output: ±5.0%
 Line Regulation:.....±0.5%
 Load Regulation: Single Output.....±0.5%
 Dual Output.....±1.0%
 Triple Output.....Primary: ±2%,
Aux. ±5.0%
 Temperature Coefficient (at FL).....±0.02%/°C max.
 Transient Response, 25% load step.....400ms
 Min. Output Current % Iout Rated (Main Output)
 FEC40-XXD3305 (3.3V)20%
 Dual and Triple10%

REMOTE ON/OFF CONTROL

Control Voltage Reference to Negative (-) Input
 Compatibility.....CMOS, TTL
 On Control.....4.8V min. or Open
 Off Control.....0.4V max. or Short

GENERAL

Efficiency.....See Chart
 Isolation Voltage.....1600 Vdc min.
 Isolation Resistance.....1000MOhms
 Switching Frequency.....300KHz typ.
 Protection.....Over Current Protection
Continuous Short Circuit Protection

ENVIRONMENTAL

Operating Temperature Range.....-25 to +71°C
 Storage Temperature Range.....-55 to +105°C
 Case Temperature.....100°C max.
 Cooling.....Free Air Convection
 EMI/RFI.....Six-Sided Continuous Shield

PHYSICAL

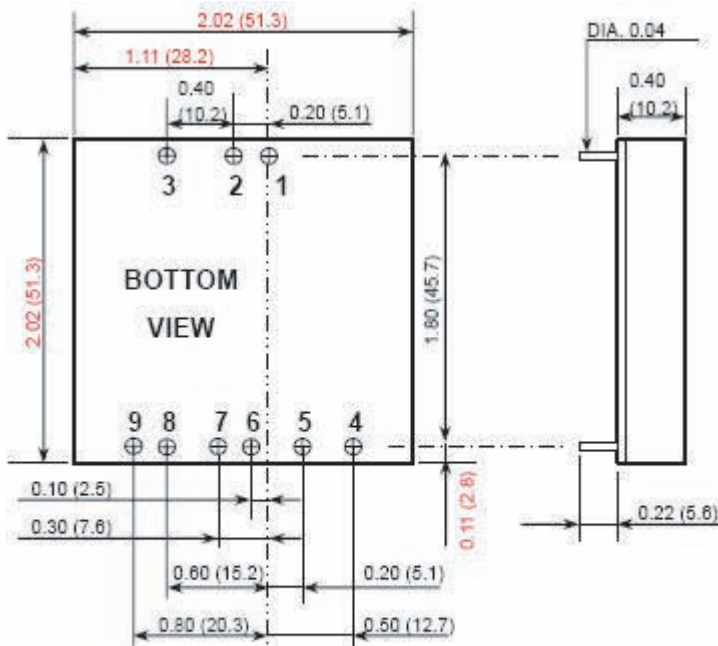
Case Material.....Nickel-coated Copper w/
 Non-Conductive Base
 Dimensions.....2.0" x 2.0" x 0.4"
 (50.8 x 50.8 x 10.2 mm)

Selection Guide

(Continued)

OUTPUTS		Input Voltage	Output	Output Current	Efficiency	Model Number	Case
		Nominal (Range) (Vdc)	Voltage (Vdc)	(mA)	%		
SINGLE	24 (18-36)	3.3	3.3	8000	87	MWA40-24S 3.3/B 2A	B 2A
		5	5	8000	89	MWA40-24S 5/B 2A	B 2A
		12	12	3333	88	MWA40-24S 12/B 2A	B 2A
		15	15	2666	89	MWA40-24S 15/B 2A	B 2A
	48 (36-75)	3.3	3.3	8000	88	MWA40-48S 3.3/B 2A	B 2A
		5	5	8000	90	MWA40-48S 5/B 2A	B 2A
		12	12	3333	89	MWA40-48S 12/B 2A	B 2A
		15	15	2666	89	MWA40-48S 15/B 2A	B 2A
DUAL	24 (18-36)	3.3 / 5	3.3 / 5	4000 / 4000	84	MWA40-24S 3.3S 5/B 2A	B 2A
	48 (36-75)	3.3 / 5	3.3 / 5	4000 / 4000	85	MWA40-48S 3.3S 5/B 2A	B 2A
TRIPLE	24 (18-36)	3.3 / ± 12	3.3 / ± 12	6000 / ±400	85	MWA40-24S 3.3-12/B 2A	B 2A
		3.3 / ± 15	3.3 / ± 15	6000 / ±300	85	MWA40-24S 3.3-15/B 2A	B 2A
		5 / ± 12	5 / ± 12	6000 / ±400	87	MWA40-24S 5-12/B 2A	B 2A
		5 / ± 15	5 / ± 15	6000 / ±300	87	MWA40-24S 5-15/B 2A	B 2A
	48 (36-75)	3.3 / ± 12	3.3 / ± 12	6000 / ±400	86	MWA40-48S 3.3-12/B 2A	B 2A
		3.3 / ± 15	3.3 / ± 15	6000 / ±300	86	MWA40-48S 3.3-15/B 2A	B 2A
		5 / ± 12	5 / ± 12	6000 / ±400	88	MWA40-48S 5-12/B 2A	B 2A
		5 / ± 15	5 / ± 15	6000 / ±300	88	MWA40-48S 5-15/B 2A	B 2A

Mechanical Specifications



- 1. All dimensions in Inches (mm)
Tolerance: X.XX±0.02 (X.X±0.5)
X.XXX±0.01 (X.XX±0.25)
- 2. Pin pitch tolerance ±0.014(0.35)

PIN Connections			
Pin	SINGLE	DUAL	TRIPLE
1	+Vin	+Vin	+Vin
2	-Vin	-Vin	-Vin
3	Ctrl	Ctrl	Ctrl
4	N/C	3.3V	+Aux Out
5	-Sense	3.3V Com	Com
6	+Sense	NC	-Aux Out
7	+Vout	NC	+Vout
8	-Vout	5V	-Vout
9	Trim	5VRTN	NC

*Ctrl: Remote on/off control
*NC: No Connection



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