

Miniature (1" x 2" x 0.4")
2:1 & 4:1 Wide Input Voltage Range (9-18, 18-36, 36-72, 9-36, 18-72Vdc)

LWA10/LWB10 SERIES

Regulated DC/DC Converters

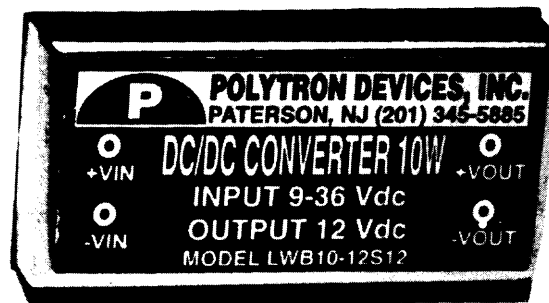
10 Watt WIDE TEMPERATURE RANGE

FEATURES:

- Wide Input Voltage Range
- -40°C to +85°C Operating Temp. Range
- Low Profile Package (1.00" x 2.00" x 0.375")
- Input/Output Isolation
- Efficiency up to 82% @FL
- Short Circuit Protection
- Over Voltage Protection
- Six-Sided Continuous Metal Shielding
- Epoxy Encapsulated
- Single and Dual Output Voltage

SPECIFICATIONS:

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



INPUT:

Input Voltage Range

LWA10 SERIES

12V nominal.....9 to 18 Vdc

24V nominal.....18 to 36 Vdc

48V nominal.....36 to 72 Vdc

LWB10 SERIES

24V nominal.....9 to 36 Vdc

48V nominal.....18 to 72 Vdc

Input Filter.....Pi Network

OUTPUT:

Voltage Accuracy.....±2%

Line Regulation, LL-HI.....±1.0%

Load Regulation, 100% to 10%.....±1.0% (Single), ±2.0% (Dual)

Temperature Coefficient.....±0.02%/° C

Transient Response Recovery Time, 25% load step

Change.....500µs

Output Noise and Ripple (20MHz BW)

Single Output.....50mV P-P Max, 35mV RMS Max

Dual Outputs.....75mV P-P Max, 50mV RMS Max

GENERAL:

Isolation Voltage.....1500 Vdc, min.

Isolation Resistance.....10⁹ Ohms, Min.

Switching Frequency.....200KHz, typ.

ENVIRONMENTAL:

Operating Temperature Range.....-25° C to +71° C * (-40°C to +85°C available)

Storage Temperature Range.....-40° C to +105° C

Cooling.....Free-Air Convection

EMI/RFI.....Six-Sided Continuous Shield

PHYSICAL:

Dimensions.....1.00 x 2.00 x .0375 Inches (25.4 x 50.8 x 10.2mm)

Case Material.....Nickel Coated Copper With Non-Conductive Base

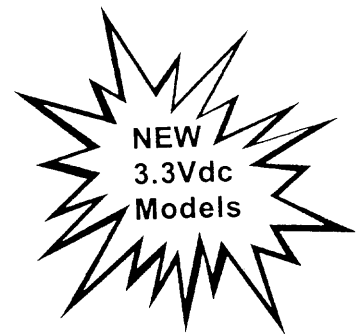
* For -40°C to +85°C operating temperature range, use suffix "W" after model number.



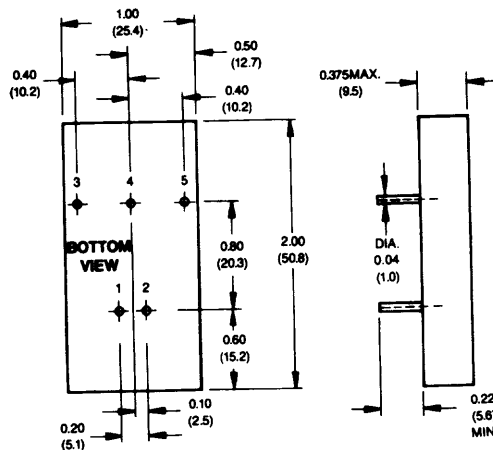
LWA10/LWB10 SERIES

REGULATED DC/DC CONVERTERS 10 WATT (CONTINUED)

2:1 INPUT RANGE	SINGLE VOLTAGE	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA)	% EFF	POLYTRON MODEL NUMBER	CASE	PRICE 1-9 QTY.
		9-18	3.3	2000	76	LWA10-12S33	P	\$59.00
		9-18	5	2000	79	LWA10-12S5	P	\$59.00
		9-18	12	830	82	LWA10-12S12	P	\$59.00
		9-18	15	670	82	LWA10-12S15	P	\$59.00
		18-36	3.3	2000	78	LWA10-24S33	P	\$59.00
		18-36	5	2000	81	LWA10-24S35	P	\$59.00
		18-36	12	830	84	LWA10-24S12	P	\$59.00
		18-36	15	670	84	LWA10-24S15	P	\$59.00
		36-72	3.3	2000	79	LWA10-48S33	P	\$59.00
		36-72	5	2000	79	LWA10-48S5	P	\$59.00
		36-72	12	830	82	LWA10-48S12	P	\$59.00
		36-72	15	670	82	LWA10-48S15	P	\$59.00
	DUAL VOLTAGE	9-18	±5	±1000	79	LWA10-12-5	P	\$63.00
		9-18	±12	± 416	81	LWA10-12-12	P	\$63.00
		9-18	±15	± 333	84	LWA10-12-15	P	\$63.00
		18-36	±5	±1000	80	LWA10-24-5	P	\$63.00
		18-36	±12	± 416	84	LWA10-24-12	P	\$63.00
		18-36	±15	± 333	81	LWA10-24-15	P	\$63.00
		36-72	±5	± 1000	79	LWA10-48-5	P	\$63.00
		36-72	±12	± 416	82	LWA10-48-12	P	\$63.00
		36-72	±15	± 333	82	LWA10-48-15	P	\$63.00



4:1 INPUT RANGE	SINGLE VOLTAGE	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA)	% EFF	POLYTRON MODEL NUMBER	CASE	PRICE 1-9 QTY.
		9-36	5	2000	79	LWB10-12S5	P	\$64.00
		9-36	12	830	82	LWB10-12S12	P	\$64.00
		9-36	15	670	82	LWB10-12S15	P	\$64.00
		18-72	5	2000	81	LWB10-48S5	P	\$64.00
		18-72	12	830	84	LWB10-48S12	P	\$64.00
		18-72	15	670	84	LWB10-48S15	P	\$64.00
	DUAL VOLTAGE	9-36	±5	±1000	79	LWB10-12-5	P	\$68.00
		9-36	±12	± 416	82	LWB10-12-12	P	\$68.00
		9-36	±15	± 333	82	LWB10-12-15	P	\$68.00
		18-72	±5	±1000	81	LWB10-48-5	P	\$68.00
		18-72	±12	± 416	84	LWB10-48-12	P	\$68.00
		18-72	±15	± 333	84	LWB10-48-15	P	\$68.00



ALL DIMENSIONS IN INCHES(mm)

Pin Connections		
Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	No Pin	Common
5	-Vout	-Vout

Options Available	Suffix	Price Adder
-40°C to +85°C Operating Temp. Range	WA	\$5.00



POLYTRON DEVICES, INC.

website: www.polytrondevices.com • e-mail: polytron@erols.com

P.O. BOX 398, Paterson, NJ 07544 USA • Tel: (973) 345-5885 • FAX: (973) 345-1264