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T-57-11



PWR13XX SERIES

NEW

AVAILABLE 1ST QTR '89
ADVANCE INFORMATION
SUBJECT TO CHANGE

24-Pin DIP, Unregulated DC/DC CONVERTER

FEATURES

- ISOLATION VOLTAGE TESTED PER UL544, VDE750, AND CSAC22.2 DIELECTRIC WITHSTAND REQUIREMENT
- BARRIER LEAKAGE CURRENT 100% TESTED AT 240VAC
- 24-PIN DIP PACKAGE
- SHORT-CIRCUIT PROTECTION
- BUILT-IN STANDOFFS

APPLICATIONS

- MEDICAL INSTRUMENTATION
- ISOLATED PORTABLE EQUIPMENT
- RIGID SAFETY REQUIREMENTS

DESCRIPTION

The PWR13XX Series offers a broad line of low-cost, high-performance, unregulated, single and dual output DC/DC converters in a 24-pin DIP package.

It is the only DIP Series of DC/DC converters currently offered that meets the high safety standards of UL, VDE, and CSA. Surface mounted components and void free, hard-cast epoxy allow for superior reliability, excellent thermal dissipation, and an extended temperature range of +85°C at no extra cost.

The PWR13XX Series is ideal for use on high-density PC boards where isolated, unregulated power must meet safety specs. Each PWR13XX Series unit shipped is tested in compliance with the dielectric withstand voltage requirements of UL544, VDE750, and CSAC22.2. Standoffs allow for PC board cleaning, helping preserve isolation. They also allow for visual inspection of solder joints from above. The short-circuit protection gives safety to the unit for prototyping and production solder-bridges.

International Airport Industrial Park • Mailing Address: PO Box 11400 • Tucson, AZ 85734 • Street Address: 6730 S. Tucson Blvd. • Tucson, AZ 85706
Tel: (602) 746-1111 • Twx: 910-952-1111 • Cable: BBRCORP • Telex: 66-6491 • FAX: (602) 889-1510

PDS-884

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SPECIFICATIONS

ELECTRICAL

Specifications at $T_a = +25^\circ\text{C}$, Rated Input Voltage, Rated Output Current unless otherwise noted.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT Ranges		4.5	5	5.5	VDC
		10.8	12	13.2	VDC
		21.6	24	26.4	VDC
		43.2	48	52.8	VDC
ISOLATION Rated Voltage Resistance		500			VDC
			10		Ω
OUTPUT Rated Voltages Rated Currents Voltage Accuracy Ripple and Noise	See Below				VDC
	See Below			± 3	mA
	5VDC outputs		100		%
	BW = DC to 10MHz NO EXTERNAL PARTS				mVp-p
REGULATION Line Load	Lowline to Highline		1.2		%%
	1/4 Load to Full Load		6		%

THERMAL

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Specification		-25		+85	$^\circ\text{C}$
Operating		-40		+100	$^\circ\text{C}$
Storage		-55		+150	$^\circ\text{C}$

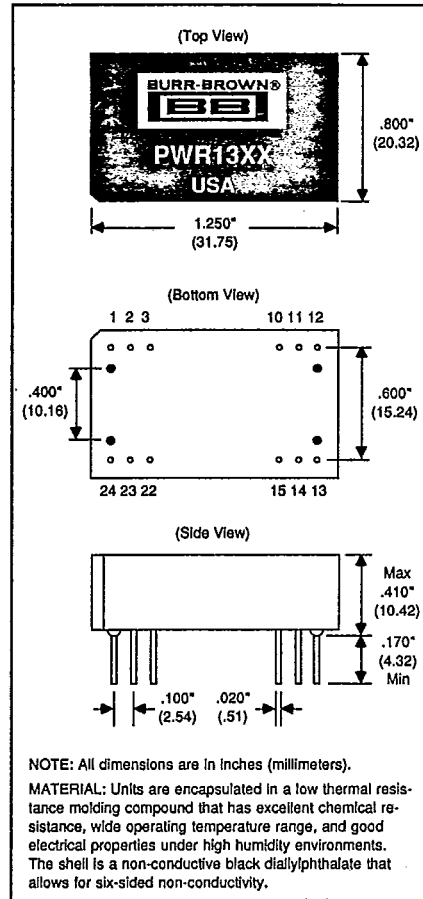
ABSOLUTE MAXIMUM RATINGS

Output Short-Circuit Duration	Continuous
Lead Temperature (soldering, 10 sec)	+300 $^\circ\text{C}$

MODEL NUMBERS

Duals

MODEL	V_{in}	V_{out}	I_{out}
PWR1300	5VDC	5VDC	200mA
PWR1301	5VDC	12VDC	83mA
PWR1302	5VDC	15VDC	67mA
PWR1303	5VDC	$\pm 12\text{VDC}$	$\pm 42\text{mA}$
PWR1304	5VDC	$\pm 15\text{VDC}$	$\pm 34\text{mA}$
PWR1305	12VDC	5VDC	200mA
PWR1306	12VDC	12VDC	83mA
PWR1307	12VDC	15VDC	67mA
PWR1308	12VDC	$\pm 12\text{VDC}$	$\pm 42\text{mA}$
PWR1309	12VDC	$\pm 15\text{VDC}$	$\pm 34\text{mA}$
PWR1310	15VDC	5VDC	200mA
PWR1311	15VDC	12VDC	83mA
PWR1312	15VDC	15VDC	67mA
PWR1313	15VDC	$\pm 12\text{VDC}$	$\pm 42\text{mA}$
PWR1314	15VDC	$\pm 15\text{VDC}$	$\pm 34\text{mA}$



PIN CONNECTIONS

PIN	SINGLES	DUALS
	FUNCTION	FUNCTION
1	NC	NC
2	NC	$-V_{out}$
3	NC	Common
10	$-V_{out}$	Common
11	$+V_{out}$	$+V_{out}$
12	NC	NC
13	$-V_{in}$	$-V_{in}$
14	NC	NC
15	NC	
22	NC	NC
23	NC	NC
24	$+V_{in}$	$+V_{in}$