C&D TECHNOLOGIES

Product Data Sheet

9 WATTS REGULATED DC/DC CONVERTERS

PWR51XX



FEATURES

- LOW COST
- LOW NOISE
- LINEAR OUTPUT REGULATION
- WIDE OPERATING TEMPERATURE RANGE: –40°C TO +100°C
- ±12VDC AND ±15VDC OUTPUTS
- INPUT AND OUTPUT FILTERING
- SIX-SIDED SHIELDING
- BARRIER LEAKAGE CURRENT 100% TESTED AT 240VAC

APPLICATIONS

- PROCESS CONTROL
- TELECOMMUNICATIONS
- PORTABLE EQUIPMENT
- MEDICAL SYSTEMS
- AIRBORNE AND SHIPBOARD ELECTRONIC CIRCUITS
- AUTOMATIC TEST EQUIPMENT

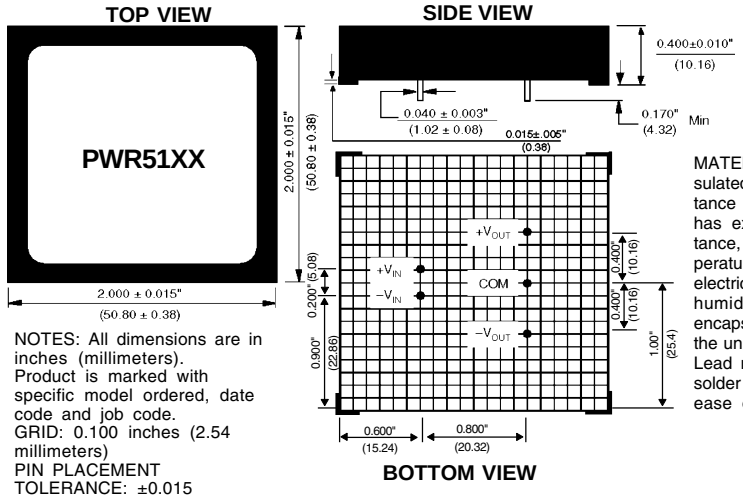
DESCRIPTION

The PWR5104 and PWR5105 offer respectively ±12VDC and ±15VDC outputs of regulated 9W power driven from your +5V system bus. These units are designed for use in such diverse applications as process control, telecommunications, portable equipment, medical systems, airborne and shipboard electronic circuits, and automatic test equipment.

The PWR5104 and PWR5105 offer a low-cost alternative to other models currently on the market. In addition, these models utilize high frequency switching in order to maintain a low EMI and RFI environment. Both models incorporate input and output filtering along with six-sided shielding to keep unwanted noise from your circuit.

Surface-mounted devices and manufacturing processes are used in the PWR5104 and PWR5105 to give you a device that is environmentally rugged. These manufacturing and design technologies also give superior isolation voltage.

MECHANICAL



NOTES: All dimensions are in inches (millimeters).
Product is marked with specific model ordered, date code and job code.
GRID: 0.100 inches (2.54 millimeters)
PIN PLACEMENT TOLERANCE: ±0.015

MATERIAL: Units are encapsulated in a low thermal resistance molding compound that has excellent chemical resistance, wide operating temperature range, and good electrical properties under high humidity environments. The encapsulant and outer shell of the unit have UL94V-0 ratings. Lead material is brass with a solder plated surface to allow ease of solderability.

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ELECTRICAL SPECIFICATIONS

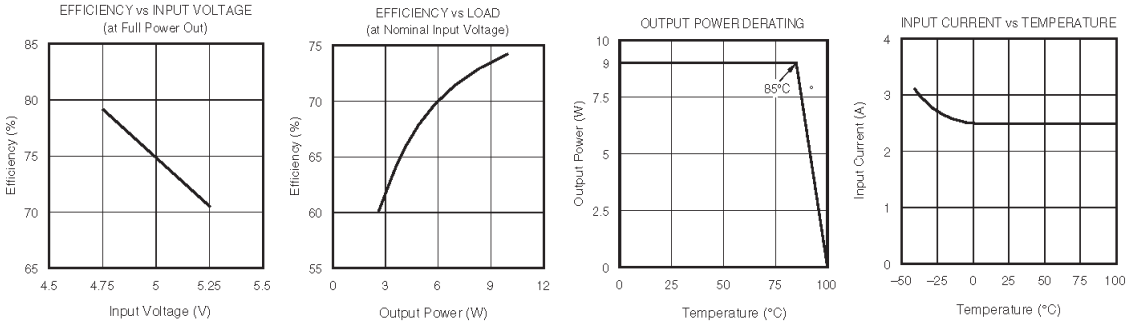
Specifications typical at T_A = +25°C, nominal input voltage, rated output current unless otherwise noted.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT					
Nominal Voltage			5		VDC
Voltage Range		4.75		5.25	VDC
Input Current	No Load		60		mA
	Rated Load		2400	2570	mA
Ripple Current	Rated Load		5		mAp-p
OUTPUT					
PWR5104 Rated Voltage			±12		VDC
Rated Current				±375	mA
PWR5105 Rated Voltage			±15		VDC
Rated Current				±300	mA
Setpoint Accuracy	Rated Load, Nominal V_{IN}		±0.5	±1.0%	%
Voltage Balance			±0.3		%
Temperature Coefficient	–25°C to +85°C		±0.01		%/°C
Ripple and Noise	BW = DC to 10MHz		6	35	mVp-p
Line Regulation			0.02		%
Load Regulation			0.04		%
Efficiency		70	75		%
ISOLATION					
Rated Voltage		750			VDC
Test Voltage	60 Hz, 10 Seconds	750			mVp-p
Resistance			10		GΩ
Capacitance			50		pF
Leakage Current	240Vrms, 60Hz			15	µArms
GENERAL					
Switching Frequency			50		kHz
Package Weight			50		g
TEMPERATURE					
Specification		-25	+25	+85	°C
Operation		-40		+100	°C
Storage		-55		+125	°C

Note: Other input to output voltages may be available. Please consult factory.

TYPICAL PERFORMANCE CURVES

Typical at T_A = +25°C, nominal input voltage and rated output current unless otherwise noted.



ABSOLUTE MAXIMUM RATINGS

Input Voltage 5.5VDC
Output Short Circuit Duration ..... 15 seconds
Internal Power Dissipation 4W
Lead Temperature (soldering, 10 seconds max) ..... +300°C

ORDERING INFORMATION

Device Family **PWR** **51XX** **/H**
PWR indicates DC/DC converter
Model Number
Selected From Table of Electrical Specifications
Screening Option

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