

PWR5105C

9 WATTS REGULATED DC/DC CONVERTERS

OBSOLETE PRODUCT
Contact factory for replacement model

FEATURES

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

ISO9001
CERTIFIED



For full details go to
www.murata-ps.com/rohs

APPLICATIONS

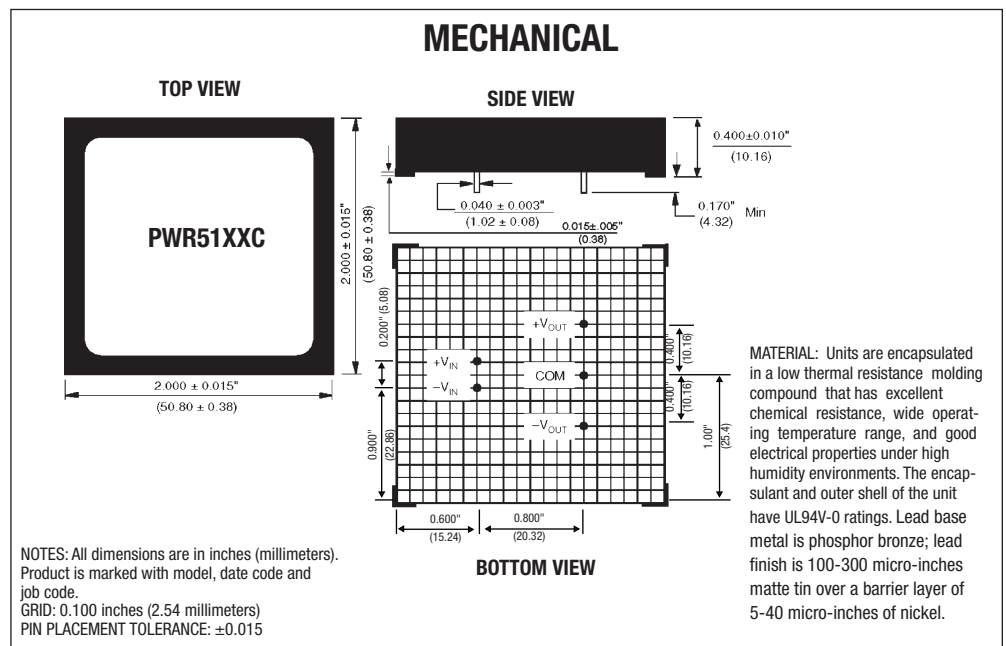
- PROCESS CONTROL
- TELECOMMUNICATIONS
- PORTABLE EQUIPMENT
- MEDICAL SYSTEMS
- AIRBORNE AND SHIPBOARD ELECTRONIC CIRCUITS
- AUTOMATIC TEST EQUIPMENT

DESCRIPTION

The PWR5105C provides 9W of regulated output power through dual, bipolar ±15Vdc outputs from a quasi-regulated +5V input. This unit is 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 PWR5105C offers a low-cost alternative to other models currently on the market. This unit incorporates high frequency switching in order to maintain a low EMI and RFI environment. This model incorporates 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 PWR5105C to give you a device that is environmentally rugged. These manufacturing and design technologies also give superior isolation voltage.



ELECTRICAL SPECIFICATIONS

Specifications typical at $T_A = +25^\circ\text{C}$, nominal input voltage, rated output current unless otherwise noted.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT					
Nominal Voltage		4.75	5	5.25	V _{DC}
Voltage Range					V _{DC}
Input Current	No Load		60		mA
	Rated Load		2400	2570	mA
Ripple Current	Rated Load		5		mA _{p-p}
OUTPUT					
Rated Voltage			±15		V _{DC}
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	mV _{p-p}
Line Regulation			0.02		%
Load Regulation			0.04		%
Efficiency			75		%
ISOLATION					
Rated Voltage		750			V _{DC}
Test Voltage	60 Hz, 10 Seconds	750			mV _{p-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.

ABSOLUTE MAXIMUM RATINGS

Input Voltage.....	5.5V _{DC}
Output Short Circuit Duration	15 seconds
Internal Power Dissipation	4W

ORDERING INFORMATION

Device Family	PWR	5105	C
PWR indicates DC/DC converter			
Model Number			
RoHS Compliant			

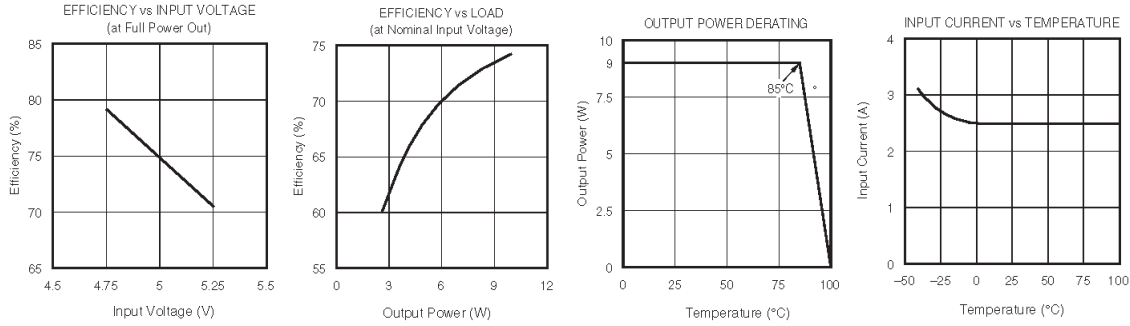
THROUGH-HOLE SOLDERING INFORMATION

These devices are intended for wave soldering or manual soldering.
They are not intended to be subject to surface mount processes under any circumstances.

The normal wave soldering process can be used with these devices where the device is subjected to a maximum wave temperature of 260°C for a period of no more than 10 seconds. Within this time and temperature range, the integrity of the device's plastic body will not be compromised and internal temperatures within the converter will not exceed 175°C. Care should be taken to control manual soldering limits identical to that of wave soldering.

TYPICAL PERFORMANCE CURVES

Typical at $T_A = +25^\circ\text{C}$, nominal input voltage and rated output current unless otherwise noted.



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