

## **PWR70C Series**

# 3 Watt, High Isolation, Unregulated DC/DC Converters

#### **FEATURES**

- Tested in compliance with UL544
- Output power to 3W
- High isolation voltage: 5000Vpk tested
- Six-sided shielding
- Input and output filtering
- Low profile package: 0.4" High

#### APPLICATIONS

- Power for data acquisition, op amps, etc.
- Process control
- Portable equipment
- Test equipment

#### **PRODUCT OVERVIEW**

The PWR70C is a dual-output DC/DC converter designed for general purpose power conversion applications where high efficiency is more important than load regulation.

The PWR70C provides a bipolar output voltage approximately equal to the input voltage magnitude. It operates over an input voltage range of 10VDC to 18VDC. Isolation voltage is tested at 5000Vpk.

Six-sided shielding suppresses electromagnetic radiation which could disturb sensitive analog measurements or interfere with system timing signals. Input filtering minimizes reflected ripple current. Output ripple voltage and switching transients are reduced by filtering the PWR70C outputs.

The PWR70C is tested in compliance with UL544, VDE750, and CSA C22.2 dielectric withstand voltage requirements.





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PART NUMBER STRUCTURE



#### **ELECTRICAL SPECIFICATIONS**

At Ta =  $+25^{\circ}$ C, +Vin = 15VDC, and lout =  $\pm 15$ mA unless otherwise noted.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT					
Rated Voltage			15		VDC
Voltage Range		10		18	VDC
Input Current	$I_{out} = \pm 3mA$		25		mA
	$I_{our} = \pm 33 \text{mA}$			150	mA
Ripple Current	$I_{out}^{out} = \pm 33 \text{mA}$		10		тАр-р
ISOLATION					
Test Voltage	60s, 60Hz	5000			Vpk
Resistance			10		GΩ
Capacitance			12		pF
Leakage Current	$V_{ISO} = 240VAC, 60Hz$			2	μA
OUTPUT					
Rated Voltage			±15		VDC
Voltage Accuracy				±5	%
Rated Current			±15		mA
Current Range		0		±100	mA
Line Regulation	10VDC < Vin < 18VDC		1.08		V/V
Load Regulation	$\pm 3$ mA $< lout < \pm 33$ mA		35		mV/mA
Ripple Voltage	$lout = \pm 3mA$		10		mVp-p
	$lout = \pm 33mA$			80	mVp-p
TEMPERATURE					
Specification		-25		+85	°C
Operating		-55		+125	°C
Storage		-65		+150	°C

Model Number

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FIGURE 1. Load Regulation.



FIGURE 2. Temperature Drift.

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This product is subject to the following <u>operating requirements</u> and the <u>Life and Safety Critical Application Sales Policy</u>: Refer to: <u>http://www.murata-ps.com/requirements/</u>

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