

PWR70 SERIES 3 WATTS UNREGULATED

DC/DC CONVERTERS

LOW COST, HIGH ISOLATION

FEATURES

- TESTED IN COMPLIANCE WITH UL544
- OUTPUT POWER TO 3W
- HIGH ISOLATION VOLTAGE: 2000VDC
- SIX-SIDED SHIELDING
- INPUT AND OUTPUT FILTERING
- LOW PROFILE PACKAGE: 0.4" High

DESCRIPTION

The PWR70 is a dual-output DC/DC converter designed for general purpose power conversion applications where high efficiency is more important than load regulation.

The PWR70 provides a plus and minus output voltage approximately equal to the input voltage magnitude. It operates over an input voltage range of 10VDC to 18VDC. Isolation voltage is a minimum of 2000VDC.

APPLICATIONS

- POWER FOR DATA ACQUISITION, OP AMPS, ETC.
- PROCESS CONTROL
- PORTABLE EQUIPMENT
- TEST EQUIPMENT

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 PWR70 outputs.

The PWR70 is tested in compliance with UL544, VDE750, and CSA C22.2 dielectric withstand voltage requirements.

MECHANICAL



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ELECTRICAL SPECIFICATIONS

At $T_A = \pm 25^{\circ}C$, $\pm V_{IN} = 15$ VDC, and $I_{OUT} = \pm 15$ mA unless otherwise noted.

PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNITS
INPUT Rated Voltage Voltage Range Input Current Ripple Current	I _{ουτ} = ±3mA I _{ουτ} = ±33mA I _{ουτ} = ±33mA	10	15 25 10	18 150	VDC VDC mA mA mAp-p
ISOLATION Rated Voltage Test Voltage Resistance Capacitance Leakage Current	60s, 60Hz V _{ISO} = 240VAC, 60Hz	2000 5000	10 12	2	VDC Vpk GΩ pF μA
OUTPUT Rated Voltage Voltage Accuracy Rated Current Current Range Line Regulation Load Regulation Ripple Voltage	$10VDC - V_{N} - 18VDC$ $\pm 3mA - I_{OUT} - \pm 33mA$ $I_{OUT} = \pm 3mA$ $I_{OUT} = \pm 33mA$	0	±15 ±15 1.08 35 10	±5 ±100 80	VDC % mA MA V/V mV/mA mV/mA mV/p-p mVp-p
TEMPERATURE Specification Operating Storage		25 55 65		+85 +125 +150	ပံ ပံ ဂံ

ABSOLUTE MAXIMUM RATINGS

Input Voltage		
Output Short-Circuit Duration	Continuous	

ORDERING INFORMATION

	<u>PWR 70 /H</u>
Device Family — PWR indicates DC/DC converter	
Model Number	
Reliability Screening — No designator indicates standard manufacturing processi	ng



FIGURE 1. Load Regulation.



FIGURE 2. Temperature Drift.

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