

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

APPLICATIONS

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

DESCRIPTION

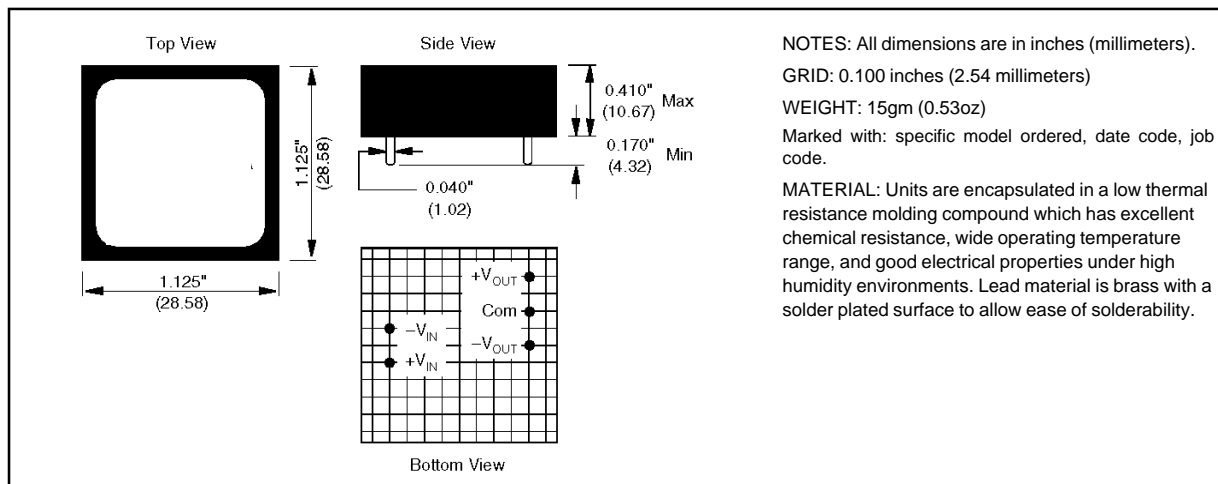
The PWR70 is a dual-output DC/DC converter designed for general purpose power conversion applications where high efficiency is more important than load regulation.

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.

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

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

ABSOLUTE MAXIMUM RATINGS

Input Voltage.....	18VDC
Output Current.....	$\pm 150\text{mA}$
Output Short-Circuit Duration.....	Continuous

ORDERING INFORMATION

Device Family _____	PWR 70 /H
PWR indicates DC/DC converter	
Model Number _____	
Reliability Screening _____	
No designator indicates standard manufacturing processing	

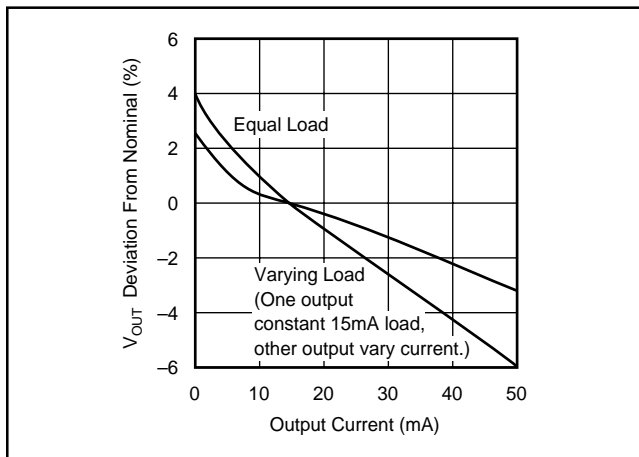


FIGURE 1. Load Regulation.

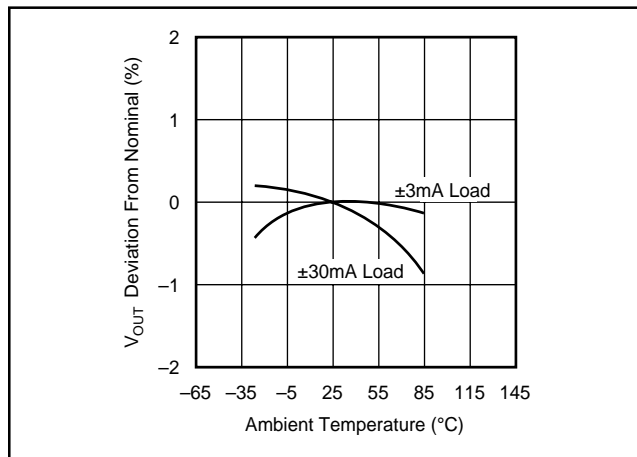


FIGURE 2. Temperature Drift.

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