C&D TECHNOLOGIES

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

APPLICATIONS

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

DESCRIPTION

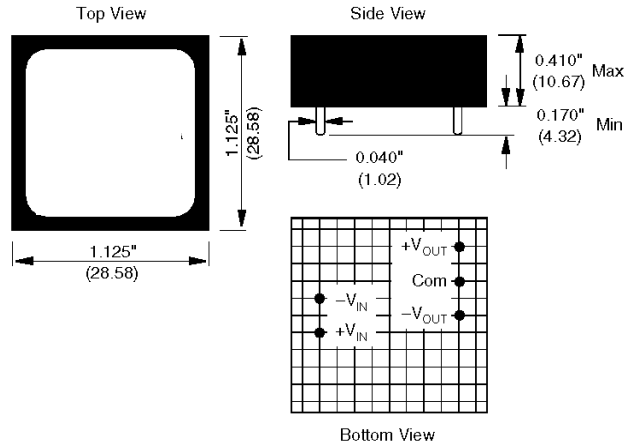
The PWR70 is a dual-output DC/DC converter designed for general purpose power conversion applications where high efficiency is more important than load regulation.

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



NOTES: All dimensions are in inches (millimeters).

GRID: 0.100 inches (2.54 millimeters)

WEIGHT: 15gm (0.53oz)

Marked with: specific model ordered, date code, job code.

MATERIAL: Units are encapsulated in a low thermal resistance molding compound which has excellent chemical resistance, wide operating temperature range, and good electrical properties under high humidity environments. Lead material is brass with a solder plated surface to allow ease of solderability.

Internet: http://www.cdpowerelectronics.com

Power Electronics Division, United States
3400 E Britannia Drive, Tucson, Arizona 85706
Phone: 800.547.2537 Fax: 520.770.9369

Power Electronics Division, Europe
C&D Technologies (Power Electronics) Ltd.
132 Shannon Industrial Estate, Shannon, Co. Clare, Ireland
Tel: +353.61.474.133 Fax:+353.61.474.141

ELECTRICAL SPECIFICATIONS

At T_A = +25°C, $+V_{IN}$ = 15VDC, and I_{OUT} = ±15mA unless otherwise noted.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT					
Rated Voltage			15		VDC
Voltage Range		10		18	VDC
Input Current	I_{OUT} = ±3mA		25		mA
	I_{OUT} = ±33mA			150	mA
Ripple Current	I_{OUT} = ±33mA		10		mAp-p
ISOLATION					
Rated Voltage		2000			VDC
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 ≤ V_{IN} ≤ 18VDC		1.08		V/V
Load Regulation	±3mA ≤ I_{OUT} ≤ ±33mA		35		mV/mA
Ripple Voltage	I_{OUT} = ±3mA		10		mVp-p
	I_{OUT} = ±33mA			80	mVp-p
TEMPERATURE					
Specification		–25		+85	°C
Operating		–55		+125	°C
Storage		–65		+150	°C

ABSOLUTE MAXIMUM RATINGS

Input Voltage.....18VDC
Output Current.....±150mA
Output Short-Circuit Duration.....Continuous

ORDERING INFORMATION

PWR 70 /H

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

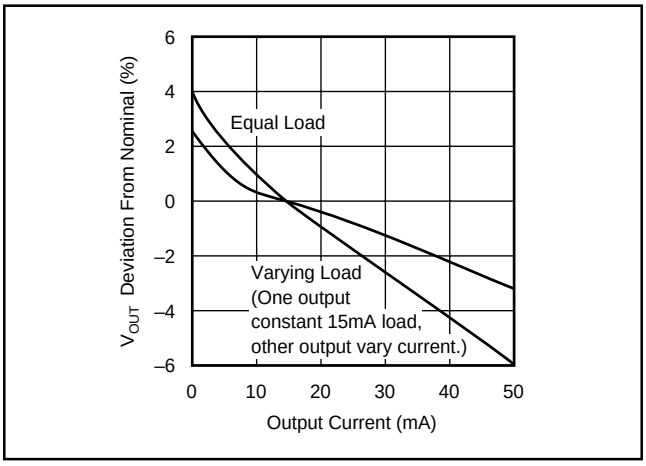


FIGURE 1. Load Regulation.

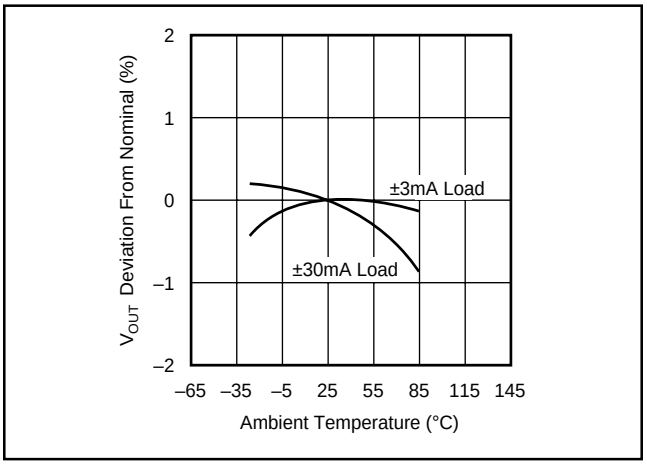


FIGURE 2. Temperature Drift.

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