

OBSOLETE PRODUCT
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3 WATT UNREGULATED WIDE INPUT RANGE DC/DC CONVERTER

PWR72

FEATURES

- | Low Price
- | High Power Output: 3 Watts
- | Wide Input Voltage Range: 5VDC To 22VDC
- | Isolation Barrier 100% Tested Per UL544, VDE750, and CSA C22.2 Dielectric Withstand
- | Isolation Barrier Leakage Current 100% Tested At 240VAC: 3µA Max
- | Low Isolation Barrier Capacitance: 10pF
- | Single-Channel; Dual Output
- | Six-Sided Shielding

DESCRIPTION

The PWR72 is a 3W, single-channel, dual-output DC/DC converter designed for low cost spot power conversion and ground elimination applications.

It provides a plus and minus output voltage approximately equal to the input voltage magnitude. The PWR72 operates over a wide range of input voltages from 5VDC to 22VDC. Its unregulated outputs give the PWR72 high efficiency power conversion.

Surface-mounted devices and manufacturing processes are used in the PWR72 to give the user a device which is more environmentally rugged than most DC/DC converters. The use of surface-mounted technologies also gives the PWR72 superior isolation voltage. A third advantage of using surface-mounted technologies is low manufacturing cost.

MECHANICAL

Top View: 1.125" (28.58mm) width, 0.750" (19.05mm) height.

Side View: 0.561" (14.24mm) height, 0.270" (6.86mm) width, 0.170" (4.30mm) lead height.

Bottom View: Shows component layout on a grid.

NOTES: All dimensions are in inches (millimeters).
 GRID: 0.100 inches (2.54 millimeters)
 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.

ELECTRICAL SPECIFICATIONS

At $T_A = +25^\circ\text{C}$, $+V_{IN} = 15\text{VDC}$, and $I_{OUT} = \pm 100\text{mA}$ unless otherwise noted.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT					
Rated Voltage			15		V _{DC}
Voltage Range		5		22	V _{DC}
Input Current	$I_{LOAD} = 0$		40		mA
	$I_{LOAD} = \text{Rated Load}$		280	330	mA
Ripple Current	$I_{LOAD} = 0$		15		mApk
	$I_{LOAD} = \text{Rated Load}$		150		mAp-p
ISOLATION					
Rated Voltage		1000			V _{DC}
Test Voltage	60s, 60Hz	3000			V _{pk}
Resistance			10		GW
Capacitance			10		pF
Leakage Current	$V_{ISO} = 240\text{VAC}, 60\text{Hz}$			3	μA
OUTPUT					
Rated Voltage			± 15		V _{DC}
Voltage Range	$I_{OUT} = \text{No Load}$	± 15		± 20	V _{DC}
	$I_{OUT} = \text{Rated Load}$	± 14.25		± 15.75	V _{DC}
Rated Power			3		W
Rated Current				100	mA
				200	mA
Current Range	Total of All Outputs			± 150	mA
	Each Output	0		300	mA
	Total of All Outputs	0			mA
Line Regulation	$10\text{V}_{DC} \leq V_{IN} \leq 18\text{V}_{DC}$		1.15		V/V
Load Regulation	$0\text{mA} \leq I_{LOAD} \leq 100\text{mA}$		15		mV/mA
Ripple Voltage	$I_{LOAD} = 0$		30		mVpk
	$I_{LOAD} = \text{Rated Load}$			150	mVpk
TEMPERATURE					
Specification		-25		+85	$^\circ\text{C}$
Operating		-40		+100	$^\circ\text{C}$

ABSOLUTE MAXIMUM RATINGS

Input Voltage.....	22V _{DC}
Output Short-Circuit Duration.....	Xs
Internal Power Dissipation.....	3W
Junction Temperature.....	+175 $^\circ\text{C}$
Package Thermal Resistance.....	13 $^\circ\text{C}/\text{W}$
Lead Temperature (Soldering, 10s).....	+300 $^\circ\text{C}$

ORDERING INFORMATION

	PWR 72 /H
Device Family _____	
PWR indicates DC/DC converter	
Model Number _____	
Reliability Screening _____	
No designator indicates standard manufacturing processing	



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