

T-57-11



PWR4XX Series

3 Watts Rated Output Power UNREGULATED DC/DC CONVERTER SERIES

FEATURES

- Isolation Voltage Tested per UL544, VDE750, and CSAC22.2 Dielectric Withstand Requirement
- Barrier Leakage Current 100% Tested at 240VAC
- Single Channel
- Single or Dual Unregulated Outputs
- Wide Operating Temperature Range: -40°C to $+100^{\circ}\text{C}$
- Input and Output Filtering
- Six-Sided Shielding

DESCRIPTION

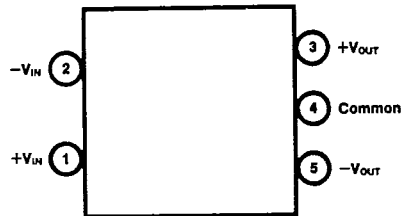
The PWR4XX Series offers a large selection of unregulated 3W DC/DC converters for use in such

diverse applications as process control, telecommunications, portable equipment, medical systems, airborne and shipboard electronic circuits, and automatic test equipment.

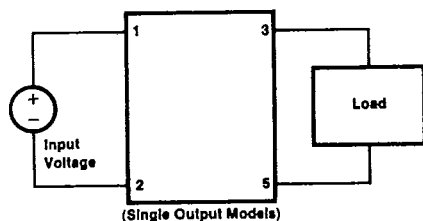
Thirty-six models allow the user to select input voltages ranging from +5VDC to +48VDC and output voltages of +5, +12, +15, ± 5 , ± 12 , or ± 15 V.

Surface-mounted devices and manufacturing processes are used in the PWR4XX Series to give the user a device which is more environmentally rugged than most DC/DC converters. The use of surface-mount technologies also gives the PWR4XX Series superior isolation voltage. Each PWR4XX Series unit is tested in compliance with the dielectric withstand voltage requirements of UL544, VDC750, and CSAC22.2.

CONNECTION DIAGRAM

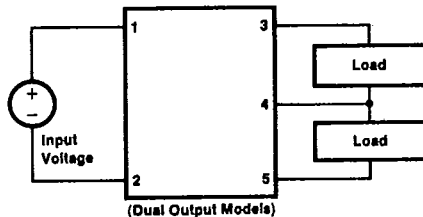


TYPICAL APPLICATIONS



ORDERING INFORMATION

Device Family _____ PWR 4XX /G
 PWR indicates DC/DC converter
 Model Number _____
 Selected from table of Electrical Characteristics
 Reliability Screening _____
 No designator indicates standard manufacturing processing
 /G indicates Level I screening—burn-in only
 /T indicates Level II screening—stabilization bake, temperature cycling, and burn-in



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PDS-567

BURR-BROWN CORP

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS⁽¹⁾

Model	Nominal Input Voltage (VDC)	Rated Output Voltage (VDC)	Rated Output Current (mA)	Maximum Input Current (mA)
PWR400	5	5	600	1034
PWR401		12	250	1034
PWR402		15	200	1034
PWR403		±5	±300	1034
PWR404		±12	±125	1034
PWR405		±15	±100	1034
PWR406	12	5	600	380
PWR407		12	250	380
PWR408		15	200	380
PWR409		±5	±300	380
PWR410		±12	±125	380
PWR411		±15	±100	380
PWR412	15	5	600	286
PWR413		12	250	286
PWR414		15	200	286
PWR415		±5	±300	286
PWR416		±12	±125	286
PWR417		±15	±100	286
PWR418	24	5	600	184
PWR419		12	250	184
PWR420		15	200	184
PWR421		±5	±300	184
PWR422		±12	±125	184
PWR423		±15	±100	184
PWR424	28	5	600	162
PWR425		12	250	162
PWR426		15	200	162
PWR427		±5	±300	162
PWR428		±12	±125	162
PWR429		±15	±100	162
PWR430	48	5	600	105
PWR431		12	250	105
PWR432		15	200	105
PWR433		±5	±300	105
PWR434		±12	±125	105
PWR435		±15	±100	105

COMMON SPECIFICATIONS⁽¹⁾

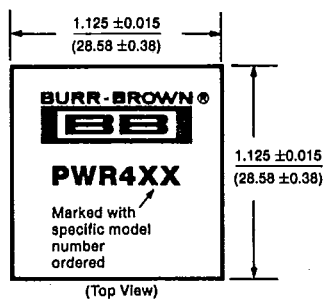
Parameter	Conditions	Min	Typ	Max	Units
INPUT					
Voltage Range		±20% of Rated Input			
Input Ripple Current	$I_{LOAD} = \text{Rated Load}$		70		mA, p-p
ISOLATION					
Rated Voltage		1000			VDC
Test Voltage	60Hz, 60 seconds	3000			V_{PEAK}
Resistance			10		GΩ
Capacitance			50		pF
Leakage Current	$V_{ISO} = 240VAC$			10	μA
OUTPUT					
Voltage Accuracy	$I_{LOAD} = \text{Rated Load}$			±5	%
Voltage (No Load)	$V_{OUT} = 5V \text{ Models}$			7	VDC
	$V_{OUT} = 12V \text{ Models}$			15	VDC
	$V_{OUT} = 15V \text{ Models}$			18	VDC
Ripple Voltage	$I_{LOAD} = \text{Rated Load}$		100		mV, p-p
Line Regulation			1		%/%
TEMPERATURE					
Specification		-25		+85	°C
Operation		-40		+100	°C
Storage		-55		+125	°C

NOTE: (1) Specifications typical at $T_A = +25^\circ C$, nominal input voltage, and rated output current unless otherwise noted.

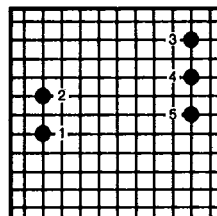
ABSOLUTE MAXIMUM RATINGS

Input Voltage 120% × rated voltage
 Output Short-Circuit Duration Momentary
 Internal Power Dissipation 2.5W
 Junction Temperature +125°C
 Package Thermal Resistance 18°C/W
 Lead Temperature
 (soldering, 10 seconds) +300°C

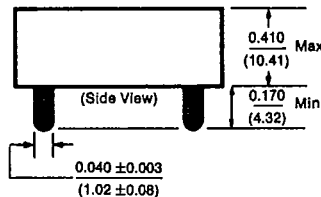
MECHANICAL



(Top View)



(Bottom View)



(Side View)

NOTES:

All dimensions are in inches (millimeters)

GRID: 0.100 inches (2.54 millimeters)

MATERIAL: 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 hot-solder-dipped surface to allow ease of solderability.