



PWR62XX SERIES
5.2 WATTS
REGULATED

DC/DC CONVERTERS

-5.2VDC OUTPUT, ECL POWER SUPPLY

FEATURES

- -5.2VDC OUTPUT
- LINEAR OUTPUT REGULATION
- INPUT AND OUTPUT FILTERING
- SIX-SIDED SHIELDING
- 1000mA OUTPUT CURRENT
- 5, 12, 15, 24, 28, and 48VDC INPUTS
- ISOLATED
- SHORT-CIRCUIT PROTECTION

APPLICATIONS

- ECL LOGIC SUPPLY
- HIGH SPEED ADC
- COMPUTERS

DESCRIPTION

The PWR62XX offers a selection of regulated 5.2W DC/DC converters for powering ECL systems. The -5.2VDC output and various input voltages are fully isolated, allowing the designer flexibility in grounding and polarity configurations.

This series is the only DC/DC converter available that provides -5.2VDC for ECL logic with no external trimming components. This reduces parts count, labor and costs in the end product. The PWR62XX Series has a low 25mVp-p typical output ripple and noise specification. No external parts are necessary

to obtain this performance. The absence of extra external filtering components further reduces total costs.

Surface-mounted devices and manufacturing processes are used in the PWR62XX to give the user a device more environmentally rugged than most converters. Power Convertibles' flexible encapsulant, Iso-ThermoFlex™, allows for excellent thermal dissipation and superior reliability. All models incorporate input and output filtering along with six-sided shielding to keep unwanted noise from your sensitive circuitry. Low noise insures system integrity.

ABSOLUTE MAXIMUM RATINGS

Output Short-Circuit Duration	Continuous
Internal Power Dissipation	3.5W
Lead Temperature (soldering, 10 seconds, max.)	+300°C

ELECTRICAL SPECIFICATIONS

Specifications typical at $T_A = +25^{\circ}\text{C}$, rated input voltage, rated output current unless otherwise specified.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT Voltage Reflected Ripple Current	PWR6200	4.75	5.0	5.25	VDC
	PWR6201	10.80	12.0	13.20	VDC
	PWR6202	13.50	15.0	16.50	VDC
	PWR6203	21.60	24.0	26.50	VDC
	PWR6204	25.20	28.0	30.20	VDC
	PWR6205	43.20	48.0	52.80	VDC
ISOLATION Rated Voltage Test Voltage Resistance Capacitance Leakage Current	60 Hz, 10 seconds	500			VDC
		500			Vpk
			10		GΩ
			80		pF
	$V_{\text{ISO}} = 240\text{VAC}, 60\text{Hz}$			25	μAms
OUTPUT Rated Voltage Voltage Setpoint Accuracy Temperature Coefficient Rated Current Rated Power Ripple and Noise	Rated Load, Nominal V_{IN}		-5.2	±1	VDC
			±0.02		%/°C
			1000		mA
			5.2		W
	BW = DC to 10MHz		25		mVp-p
REGULATION Line Load	High Line to Low Line		±0.04		%
	Rated Load to No Load		0.06		%
GENERAL Efficiency Switching Frequency Package Weight MTTF per MIL-HDBK-217 Rev. E.	Circuit Stress Method		68		%
			170		kHz
			50		g
			762,000		Hr
TEMPERATURE Specification Operating Storage		0	+25	+70	°C
		-25		+85	°C
		-40		+110	°C

MECHANICAL

