



DESCRIPTION

The PWR1546A has a maximum of 1mVp-p output noise. This unit incorporates input and output filtering along with an internal shield, giving full six-sided shielding that keeps unwanted radiated noise from your circuit. No external parts are required to meet the 1mVp-p maximum guaranteed output noise.

The PWR1546A is a miniature DC/DC converter providing dual isolated ± 15 VDC outputs from a single ± 5 VDC input. Each output will supply

FEATURES

- 1mVp-p MAXIMUM OUTPUT NOISE
- 5W RATED OUTPUT POWER
- SHORT-CIRCUIT PROTECTION
- SIX-SIDED SHIELDING
- INTERNAL INPUT AND OUTPUT FILTERING
- FULLY REGULATED

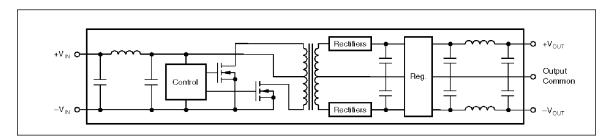
APPLICATIONS

- HIGH RESOLUTION DATA ACQUISTION
- PRECISION TEST EQUIPMENT
- HIGH GAIN AMPLIFIERS
- PRECISION INSTRUMENTATION

full-rated current over the entire specification range. Each output is regulated and is protected against all shorts. The isolation barrier is guaranteed to be 750Vpc.

Surface-mounted components and thermal encapsulant allow superior reliability and excellent thermal dissipation. The calculated MTTF (per MIL-HDBK-217 Rev. E, Circuit-Stress Analysis Method) is in excess of 100 years at 25°C.

SIMPLIFIED CIRCUIT DIAGRAM







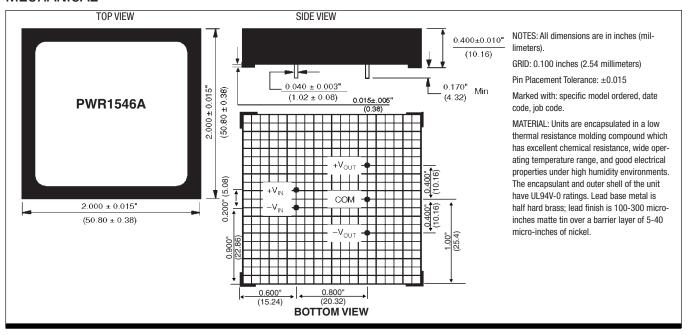
COMMON SPECIFICATIONS

Specifications typical at $T_A = +25$ °C, rated input voltage, rated output current unless otherwise noted.

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
INPUT Rated Voltage Voltage Range Current Reflected Ripple Current	ILOAD = 0 ILOAD = Rated Output BW = DC to 10MHz	4.5	5.0 80 1650 18	5.5	Voc Voc mA mA mAp-p
ISOLATION Rated Voltage Test Voltage Resistance Capacitance Leakage Current	60 Hz, 10 seconds Viso = 240VAC, 60HZ	750 750	10 110	15	Voc Vpk GΩ pF μArms
OUTPUT Rated Voltage Voltage Setpoint Accuracy Voltage Balance Temperature Coefficient Rated Current Transient Recovery Time	Rated Load, Nominal VIN To 0.1% of Final Value		±15 ±0.01 ±167 10	±1 ±0.5	Vbc % % %/°C mA ms
REGULATION Line Load	4.5Vpc to 5.5Vpc 0mA to ±167mA		±0.02 0.02		% %
OUTPUT NOISE Ripple and Noise	BW = DC to 10MHz		0.6	1.0	mVp-p
GENERAL Efficiency Package Weight Switching Frequency MTTF per MIL-HDBK-217,Rev E.	Circuit Stress Method, TA=+25°C		60 50 50 890		% g kHz kHr
TEMPERATURE Specification Operating Storage		-25 -40 -55	+25	+85 +100 +125	°C °C

NOTE: Other input and output voltages may be available upon request. Please consult factory.

MECHANICAL





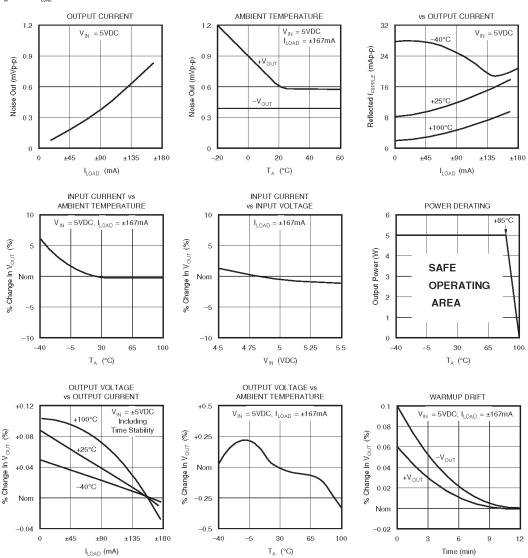
ABSOLUTE MAXIMUM RATINGS

ORDERING INFORMATION



TYPICAL PERFORMANCE CURVES

 $T_{_{A}}=+25^{\circ}\text{C}, V_{_{IN}}=5\text{VDC}, I_{_{I,\Omega\text{AD}}}=\pm167\text{mA}$ unless otherwise noted.



SOLDERING INFORMATION

The PWR1546AC device is intended for wave soldering or manual soldering. It is not designed or intended to withstand surface mount processes under any circumstances.

The normal wave soldering process can be used with this device where it is subjected to a maximum wave temperature of 260°C for a period of no more than 10 seconds. Within the constraints of these time and temperature limits, the integrity of the device's plastic body will not will not be compromised and internal temperatures within the converter will not exceed 175°C. Care should be exercised in controlling the manual soldering process within these same time and temperature limits.





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