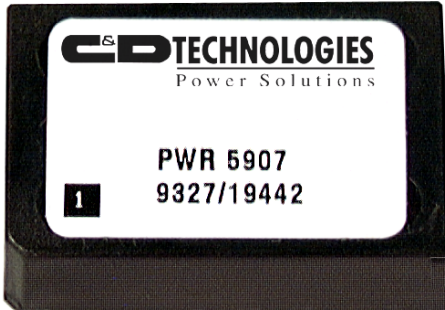


## .5 - 1.0 WATT DUAL-IN-LINE REGULATED DC/DC CONVERTER

### PWR59XX



#### DESCRIPTION

The PWR59XX Series offers an extensive selection of input and output voltage combinations to choose from, including a 9V output for Cheapernet local area networking. Both single and dual output voltages are available. These miniature, regulated DC/DC converters come in a 24-pin dual-in-line package for applications where space is a concern. The small size is possible through the use of surface mounted devices and manufacturing technologies. SMT processes and components also make it possible to offer the Series with no power derating over an extended temperature range of  $-25^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$ .

A push-pull input stage ensures fixed frequency, non-saturating operation of the oscillator section of the PWR59XX Series. MOSPOWER transistors are used as high speed switching elements. These rugged devices provide higher frequency to 500kHz operation, and uncomplicated drive circuitry. Reduced component count means higher reliability. High frequency operation means smaller magnetics. Higher isolation voltages are possible, due to the section wound transformer. Higher frequency operation also means less noise generation within the system's bandwidth.

Linear regulators, used in the output stage, output voltage variations due to line and load changes, also provide short-circuit current limiting and thermal overload protection.

#### FEATURES

- High Reliability
- 24-Pin DIP Package
- Internal Input and Output Filtering
- Short-Circuit Current Limiting
- Thermal Overload Protection
- Built-In Standoffs
- Industry Standard Pinout

#### MECHANICAL

**TOP VIEW**

**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. The encapsulant and outer shell of the unit have UL94V-0 ratings. Lead material is brass with a solder plated surface to allow ease of solderability.

**SIDE VIEW**

**BOTTOM VIEW**

**PIN CONNECTIONS**

PIN #	SINGLES	DUALS
1	+VIN	+VIN
2	NC	-VOUT
3	NC	Common
10	-VOUT	Common
11	+VOUT	+VOUT
12	-VIN	-VIN
13	-VIN	-VIN
14	+VOUT	+VOUT
15	-VOUT	Common
22	NC	Common
23	NC	-VOUT
24	+VIN	+VIN

NC = Do Not Connect  
Duplicate pin functions are internally connected.  
All dimensions are in inches (millimeters).  
GRID: 0.100 inches (2.54 millimeters)  
PIN PLACEMENT TOLERANCE:  $\pm 0.015''$   
Marked with: specific model ordered, date code, job code.

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