

UP TO 5 WATTS - LR SERIES

2:1 Input, Single and Dual Outputs

FEATURES

- ◆ Output Power Up to 5 Watts
- ◆ Wide Input Voltage Range (2:1)
- ◆ 1600VDC Input/Output Isolation
- ◆ Industry Standard Pin-Out
- ◆ Input Filter for Low Reflected Ripple Current
- ◆ 80% typical efficiency
- ◆ Up to +85°C Case Operating Temperature
- ◆ Five Year Warranty



THE LR SERIES FROM WALL INDUSTRIES

The LR Series of DC/DC converters features units of up to 5 watts in a 1.0 x 2.0 x 0.38" package. The units are PC mountable and include an input filter for low reflected ripple, thermal shutdown, up to 1600VDC input/output isolation and typical efficiencies of 80%.

SPECIFICATIONS: LR SERIES

All specifications apply @ +25 C ambient unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltage Range .....9-18, 18-36, 36-72VDC  
 Input Filter.....Pi-Filter

OUTPUT SPECIFICATIONS

Output Current .....See table  
 Voltage Accuracy .....± 2% max.  
 Voltage Balance(dual output w/ balanced load) .....± 2% max.  
 Line Regulation (single output) .....± 0.2%  
 Load Regulation (single output, 25-100% load).....± 0.1%  
 Load Regulation (dual output, 25-100% load) .....± 1.0%  
 Ripple/Noise (20MHz BW) .....75mV, p-p  
 Transient Response(Single: 25% load step).....200µsec  
 Short Circuit Protection .....Indefinite  
 Thermal Shutdown .....approx. +100°C case

GENERAL SPECIFICATIONS

Efficiency.....80%(typical)  
 Isolation Voltage (input to output) .....1600VDC(min.)  
 Isolation Resistance (input to output).....100Mohms  
 Switching Frequency.....200kHz (typical)

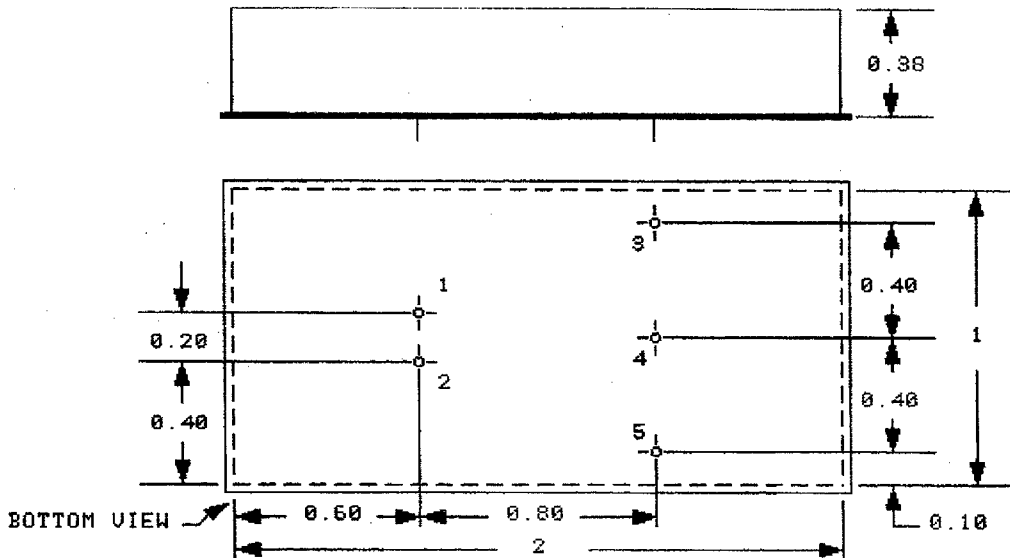
ENVIRONMENTAL SPECIFICATIONS

Operating Temperature .....-25 to+85°C (case)  
 Storage Temperature .....-55 to +125°C  
 Humidity (non-condensing) .....20% to 95% R.H.  
 Cooling .....Free Air Convection

PHYSICAL SPECIFICATIONS

Dimensions: .....1.0 x 2.0 x 0.38"  
 Weight .....1.0 oz.  
 Case Material .....Nickel-Coated Copper with  
 .....Non-Conductive Baseplate

Due to advances in technology, specifications subject to change without notice.



| Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) | Model Number |
|---------------------|----------------------|---------------------|--------------|
| 9-18                | 5                    | 1.00                | LR12S5-1000  |
|                     | 12                   | 0.470               | LR12S12-470  |
|                     | 15                   | 0.400               | LR12S15-400  |
|                     | ± 12                 | 0.230               | LR12D12-230  |
|                     | ± 15                 | 0.190               | LR12D15-190  |
| 18-36               | 5                    | 1.00                | LR24S5-1000  |
|                     | 12                   | 0.470               | LR24S12-470  |
|                     | 15                   | 0.400               | LR24S15-400  |
|                     | ± 12                 | 0.230               | LR24D12-230  |
|                     | ± 15                 | 0.190               | LR24D15-190  |
| 36-72               | 5                    | 1.00                | LR48S5-1000  |
|                     | 12                   | 0.470               | LR48S12-470  |
|                     | 15                   | 0.400               | LR48S15-400  |
|                     | ± 12                 | 0.230               | LR48D12-230  |
|                     | ± 15                 | 0.190               | LR48D15-190  |

| PIN CONNECTIONS |        |        |
|-----------------|--------|--------|
|                 | Single | Dual   |
| 1               | +Vin   | +Vin   |
| 2               | -Vin   | -Vin   |
| 3               | +Vout  | +Vout  |
| 4               | No Pin | Common |
| 5               | -Vout  | -Vout  |

Note: 1. All case and pin-to-case dimensions reference only unless otherwise noted.