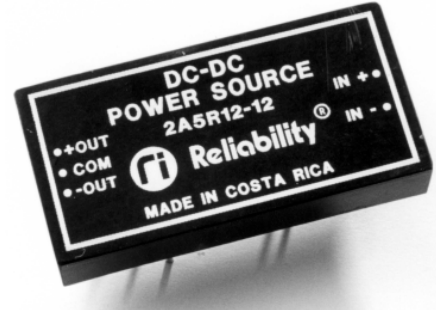


## 2 Watt Regulated DC/DC Converter

### Key Features

- Designed for analog requirements
- Input/Output isolation
- Dual regulated outputs
- Continuous self-recovering short circuit protection
- Thermal overload protection
- 0.5 line and load regulation
- No derating to 71° C
- Meets FCC Section 15, Sub Part J, A & B



These 2 Watt regulated DC/DC converters operate from an input of 5 volts and make available at board level dual outputs of  $\pm 12$  or  $\pm 15$  VDC. They operate without derating or heatsinking over the full temperature range. Solid tantalum capacitors are used for enhanced reliability. The units are designed for analog applications such as Op Amps, A/D, D/A and F/V converters. They can also be used for negative voltage bias applications.

### General Electrical Specifications

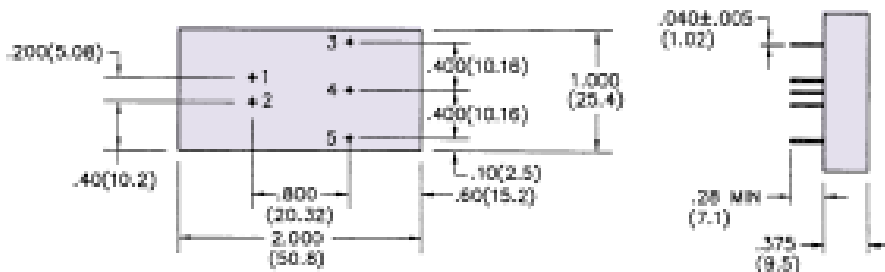
(Specifications at Nominal Input and 25 C, nominal input voltage and rated output current unless otherwise noted.)

Parameter	Limits	Conditions
Input Voltage Range 2A5R12-12 & 2A5R15-15	4.5 - 5.5 VDC	
2A5R12-12 & 2A5R15-15	Common Mode	
Reflected Input Ripple	Input Inductor	
Input/Output Isolation	80 ma P-P (Max)	
Voltage	500 VDC (Min)	All Device Types
Resistance	$10^3$ megohms (Min)	
Output Accuracy	$\pm 5\%$	Nom. Line at Full Load
Load Regulation	0.5%	No Load to Full Load
Line Regulation	0.5%	Low Line to High Line
Output Voltage Temperature Coefficient	$\pm .015\%$ per °C	Typical
Output Noise/Ripple	50mV P-P (Max)	20Hz-20MHz Bandwidth
2A5R12-12 & 2A5R15-15		
Short Circuit Protection		
2A5R12-12 & 2A5R15-15	Constant Current	
Duration	Continuous	
Switching Frequency		
2A5R12-12 & 2A5R15-15	40KHz Typical	
Operating Temperature	-25°C to +71°C	
Derating	None	To 71°C
Storage Temperature	-55°C to +125°C	

## Selection Guide

Device Type	Input Voltage Range VDC	Typical Input Current (A) @ Max Load	Output Voltage VDC	Max Output Current (mA)	Package/ Pinout
2A5R12-12	4.50 - 5.50	.660	± 12	± 75	2A
2A5R15-15	4.50 - 5.50	.660	± 15	± 60	2A

## Mechanical Specification (dimensions in inches)

**2A**


PIN	PIN CONNECTIONS
1	+INPUT
2	-INPUT
3	+OUTPUT
4	COMMON
5	-OUTPUT

**NOTES (ALL DEVICES & PACKAGES):**

- All dimensions in parentheses are metric.
- Tolerances unless otherwise specified:  
 .xx = ± .03 (.76) .xxx = ± .015 (.38)

### Reliability Power Locations

HEADQUARTERS & CUSTOMER SERVICE	SALES
Reliability Power, Incorporated 33 Musick Irvine, CA 92618 USA Tel: (949) 305-6700 Fax: (949) 305-6701  <a href="http://www.reliabilitypower.com">www.reliabilitypower.com</a>	Reliability Power, Incorporated Attention: SALES  Tel: (805) 449-1667 Fax: (805) 557-4530  <a href="mailto:sales@reliabilitypower.com">sales@reliabilitypower.com</a>