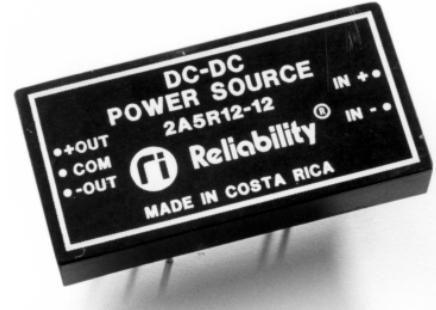


2 Watt Regulated DC/DC Converter

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 ± 12 or ± 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

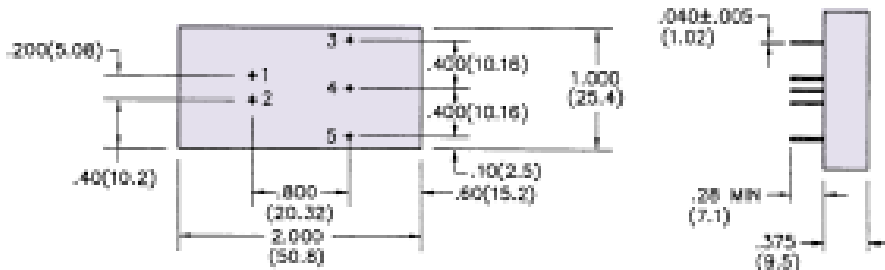
(Specifications at Nominal Input and 25 C, nominal input voltage and rated output current unless otherwise noted.)

| 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 |
|--|---|
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