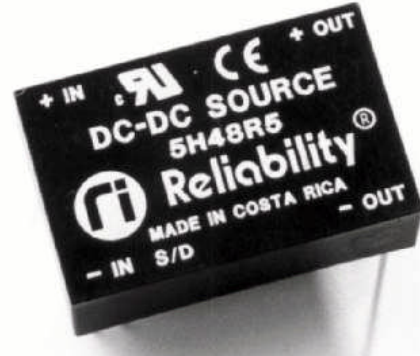


5 Watt Regulated DC/DC Converters

Key Features

- High Density, 12.5 W/cu.in.
- Wide Input Ranges
- Overload/Short Circuit Protection
- SMD Technology
- FCC Section 15 Sub Part J,
- Class A Radiated and Conducted
- CE (LVD)
- L-C Input Filter
- UL, CSA Approved (48Vi only)
- Remote On/Off
- 1500 VDC Isolation



Applications

- Wireless Communications
- Satellite Guidance Systems
- Cellular Base Stations
- Analog Systems
- Private Branch Exchanges (PBX, PABX)
- Distributed Power Systems
- Industrial Control Systems

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 | See Selection Guide) | |
| Input Filter | Common Mode Section | |
| Input Ripple Current | 200 ma (P-P) | Typical |
| Input/Output Isolation | 1500 VDC | |
| Output Voltage Accuracy | 2% | Full Load Nominal Line |
| Minimum Load | 10% of Full Load | |
| Output Noise | 100mV (P-P) | 20 MHZ Bandwidth |
| Line Regulation | 0.5% | Full Load |
| Load Regulation | 0.5% | 10% to 100% of Full Load |
| Efficiency | 80% Typical 76% Typical | 5, 12V Output 2.5, 3.3V Output |
| Remote On/Off | Active Low | With respect to Pin 1 |
| Operating Temperature | -40 °C to +85 °C | No Derating |
| Storage Temperature | -55 °C to +125 °C | |
| Short Circuit Protection | Continuous | |
| Oversvoltage Protection | 3.3 VDC 4.3 VDC 6.2 VDC 15 VDC 18 VDC | 2.5 VDC Output 3.3 VDC Output 5.0 VDC Output 12 VDC Output 15 VDC Output |

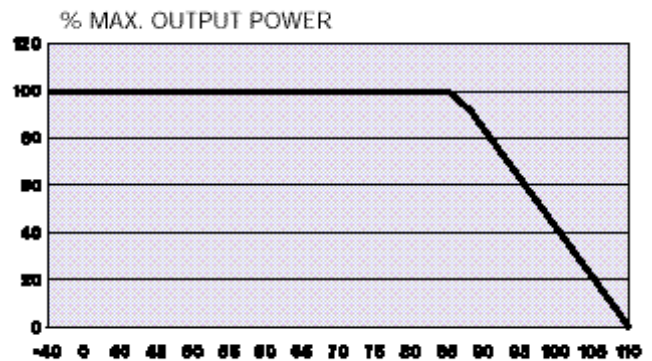
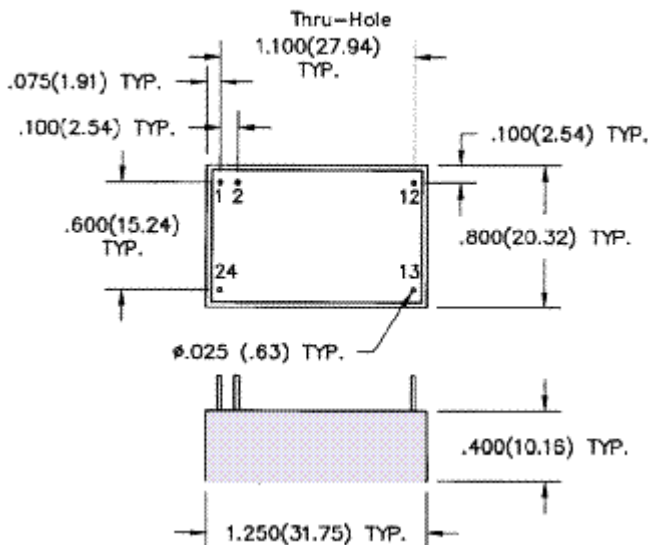
NOTE: During testing, the 10% minimum load should be resistive. If an active load is used, it must become active at approximately 80% of the power supply output.

SELECTION GUIDE

| Device Type | Input Voltage | Input Current A (Max) | Output Voltage | Output Current A (Max) |
|-------------|---------------|--------------------------|----------------|---------------------------|
| 5H18R5 | 9-36 | 0.380 | 4.90 – 5.10 | 1.0 |
| 5H24R5 | 12-36 | 0.270 | 4.90 – 5.10 | 1.0 |
| 5HI24R5 | 12-36 | 0.270 | 4.90 – 5.10 | 1.0 |
| 5H24R9 | 12-36 | 0.265 | 8.82 – 9.18 | 0.56 |
| 5H24R15 | 12-36 | 0.261 | 14.7 - 15.3 | 0.33 |
| 5H48R2.5 | 18-75 | 0.137 | 2.45 - 2.55 | 2.0 |
| 5H48R3.3 | 18-75 | 0.135 | 3.23 - 3.37 | 1.5 |
| 5H48R5 | 18-75 | 0.132 | 4.90 - 5.10 | 1.0 |
| 5HI48R5 | 18-75 | 0.132 | 4.90 - 5.10 | 1.0 |
| 5HI48R5HV | 18-75 | 0.132 | 4.90 - 5.10 | 1.0 |
| 5H48R12 | 18-75 | 0.132 | 11.76 - 12.24 | 0.42 |

Pin Connections: “5H” model types “5HI” model types

| Pin # | Function | Function |
|-------|----------|----------|
| 1 | - Input | + Input |
| 2 | Enable | NC |
| 12 | - Output | - Output |
| 13 | + Output | + Output |
| 24 | + Input | - Input |

Mechanical Specification (dimensions in inches)
WEIGHT: 15 GRAMS
TEMPERATURE DERATING

AMBIENT TEMPERATURE: DEG. C
NOTES (ALL DEVICES & PACKAGES):

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

| Reliability Power Locations | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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