

Features

Regulated Converters

- 3W DIP Package Isolated Dual Outputs Vout1 / Vout2
- Input / Output 2KVDC Isolation min.
- UL94V-0 Package Material
- Continuous Short Circuit Protection Auto-Restarting (V1)
- Wide Input 2:1
- Internal SMD design
- 100% Burned In

ECONOLINE

DC/DC-Converter

REC3-DRWI/A Series

3 Watt

DIP24

Isolated

Dual Output



EN-60950-1 Certified
EN-60601-1 Certified
UL-60950-1 Certified



Selection Guide

| Part Number | Input Voltage (VDC) | Output Voltage Vout1 (VDC) | Output Current at Vout1 (mA) | Output Voltage Vout2 (VDC) | Output Current at Vout2 (mA) |
|-------------------|---------------------|----------------------------|------------------------------|----------------------------|------------------------------|
| REC3-050505DRWI/A | 4.5-9 | 5 | 300* | 5 | 300 |
| REC3-050509DRWI/A | 4.5-9 | 5 | 300* | 9 | 167 |
| REC3-050512DRWI/A | 4.5-9 | 5 | 300* | 12 | 125 |
| REC3-050515DRWI/A | 4.5-9 | 5 | 300* | 15 | 100 |
| REC3-120505DRWI/A | 9-18 | 5 | 300* | 5 | 300 |
| REC3-120509DRWI/A | 9-18 | 5 | 300* | 9 | 167 |
| REC3-120512DRWI/A | 9-18 | 5 | 300* | 12 | 125 |
| REC3-120515DRWI/A | 9-18 | 5 | 300* | 15 | 100 |
| REC3-240505DRWI/A | 18-36 | 5 | 300* | 5 | 300 |
| REC3-240509DRWI/A | 18-36 | 5 | 300* | 9 | 167 |
| REC3-240512DRWI/A | 18-36 | 5 | 300* | 12 | 125 |
| REC3-240515DRWI/A | 18-36 | 5 | 300* | 15 | 100 |
| REC3-480505DRWI/A | 36-72 | 5 | 300* | 5 | 300 |
| REC3-480509DRWI/A | 36-72 | 5 | 300* | 9 | 167 |
| REC3-480512DRWI/A | 36-72 | 5 | 300* | 12 | 125 |
| REC3-480515DRWI/A | 36-72 | 5 | 300* | 15 | 100 |

* V1 min. load 100mA to supply V2 well

* add suffix "M" for Metal Case, e.g. REC3-240505DRWI/AM

For alternative custom output voltage and power combinations, please contact Recom Technical Support

Specifications (Core Operating Area)

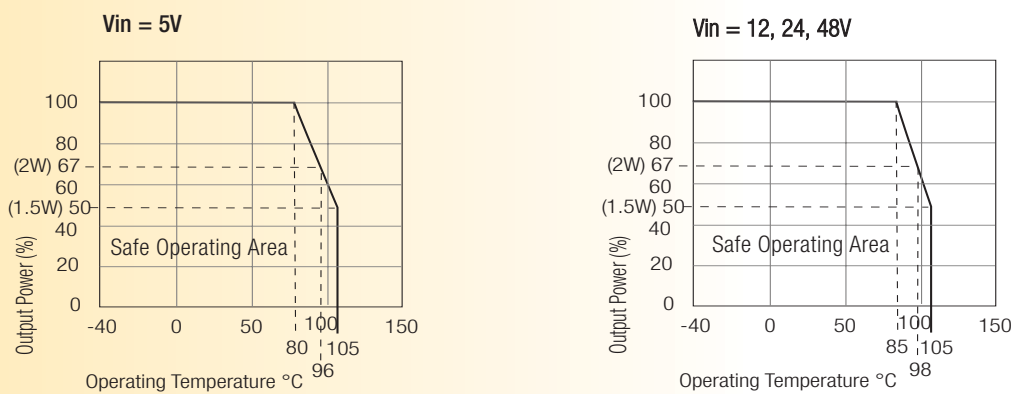
| | | |
|---|--------------------------------------|----------------------------|
| Input Voltage Range | 2:1 | |
| Output Voltage Accuracy | ±2% max. | |
| Line Voltage Regulation | ±0.4% max. | |
| Load Voltage Regulation (10% to 100% full load) | ±0.6% max. | |
| Output Ripple and Noise (at 20MHz BW) | 50mVp-p max. | |
| Operating Frequency | 100kHz typ. | |
| No Load Power Consumption | 300mW max. | |
| Isolation Voltage | Input / Output (tested for 1 second) | 2000VDC min. |
| | Vout1 / Vout2 (tested for 1 second) | 500VDC min. |
| Rated Working Voltage | (long term isolation) | see Application Notes |
| Isolation Capacitance | 40pF typ. | |
| Isolation Resistance | 1 GΩ min. | |
| Short Circuit Protection (V1) | Continuous | |
| Operating Temperature Range | Vin=5V | -40°C to +80°C (see Graph) |
| (free air convection) | Vin=12, 24, 48V | -40°C to +85°C (see Graph) |
| Storage Temperature Range | -55°C to +125°C | |

continued on next page

Specifications (Core Operating Area)

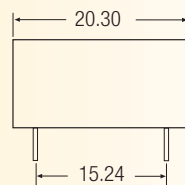
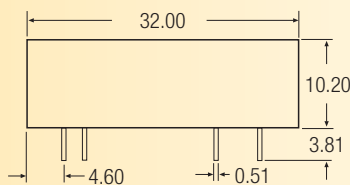
| | | | |
|-------------------|---|-----------------------|-----------------------------|
| Relative Humidity | 95% RH | | |
| Case Material | Non-Conductive Plastic | | |
| Thermal Impedance | Natural convection | 20°C/W for metal case | |
| Package Weight | 13g | | |
| MTBF (+25°C) | <i>Detailed Information see</i> | using MIL-HDBK 217F | 877 x 10 ³ hours |
| (+80°C) | <i>Application Notes chapter "MTBF"</i> | using MIL-HDBK 217F | 138 x 10 ³ hours |

Derating-Graph (Ambient Temperature)



Package Style and Pinning (mm) Wide Input 2:1

24 PIN DIP Package



Pin Connections

| Pin # | Dual |
|-------|---------|
| 2 | -Vin |
| 3 | -Vin |
| 9 | +Vout 2 |
| 11 | -Vout 2 |
| 14 | +Vout 1 |
| 16 | -Vout 1 |
| 22 | +Vin |
| 23 | +Vin |

NC = No Connection
XX.X ± 0.5 mm
XX.XX ± 0.25 mm

Recommended Footprint Details

