

## Features

## Regulated Converters

- 7.5W DIP24 Package
- Approved for Medical Applications
- UL and EN Safety Approvals
- Continuous Short Circuit Protection (power limiting)
- 5 Side Shielded Metal Case
- Efficiency to 83%

### Selection Guide

| Part Number           | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) | Efficiency (%) |
|-----------------------|---------------------|----------------------|---------------------|----------------|
| REC7.5-2424DRW/H2/A/M | 18-36               | ±24                  | ±156                | 83             |

### Specifications (measured at $T_A = 25^\circ\text{C}$ , nominal input voltage, full load and after warm-up)

|                                                   |                                       |                                     |
|---------------------------------------------------|---------------------------------------|-------------------------------------|
| Input Voltage Range                               |                                       | 18-36VDC (2:1)                      |
| Output Voltage Accuracy                           |                                       | ±1.5% max.                          |
| Line Voltage Regulation                           |                                       | 0.4% max.                           |
| Load Voltage Regulation (25% to 100% full load )  |                                       | 0.8% max.                           |
| Under Voltage Lockout                             | DC-DC ON                              | >17.4 VDC typ.                      |
|                                                   | DC-DC OFF                             | <16.7 VDC typ.                      |
| Minimum Load                                      |                                       | 10%                                 |
| Output Ripple and Noise                           | (at 20MHz BW)                         | 75mVp-p max.                        |
| Operating Frequency (Full Load)                   |                                       | 280kHz typ.                         |
| Input Filter                                      |                                       | PI Network                          |
| Efficiency at Full Load                           |                                       | 83 typ.                             |
| Isolation Voltage                                 | (tested for 1 second)                 | 2000VDC                             |
| Isolation Capacitance                             |                                       | 56pF typ.                           |
| Isolation Resistance                              |                                       | 1GΩ min.                            |
| Short Circuit Protection                          |                                       | Continuous, Auto Restart            |
| Overload Protection                               | (100% Load & Vin=24V)                 | 150% typ.                           |
| Operating Temperature Range (free air convection) |                                       | -40°C to +71°C (see Graph)          |
| Storage Temperature Range                         |                                       | -55°C to +105°C                     |
| Maximum Case Temperature                          |                                       | 100°C max.                          |
| Relative Humidity                                 |                                       | 95% RH                              |
| Vibration                                         |                                       | 10-55Hz, 2G, 30Min along X, Y and Z |
| Case Material                                     |                                       | Nickel Plated Copper                |
| Baseplate Material                                |                                       | Non-Conductive Black Plastic        |
| Potting Material                                  |                                       | Epoxy (UL94V-0)                     |
| Dimensions                                        |                                       | 32.00 x 20.30 x 10.20               |
| Package Weight                                    |                                       | 18g                                 |
| MTBF (+25°C)                                      | using MIL-HDBK 217F                   | >800 x 10³hours                     |
| (+71°C)                                           | using MIL-HDBK 217F                   | >200 x 10³hours                     |
| Certifications                                    |                                       |                                     |
| UL General Safety                                 | Report: E358085                       | UL60950-1                           |
| EN General Safety                                 | Report: SPCLVD1212007                 | EN60950-1                           |
| EN Medical Safety                                 | Report: MDD1205098-3<br>+ RM1205098-3 | EN60601-1, 3rd edition              |

**ECONOLINE**

DC/DC-Converter

with 3 year Warranty

**RECOM**

## 7.5 Watt DIP24 Single & Dual Output

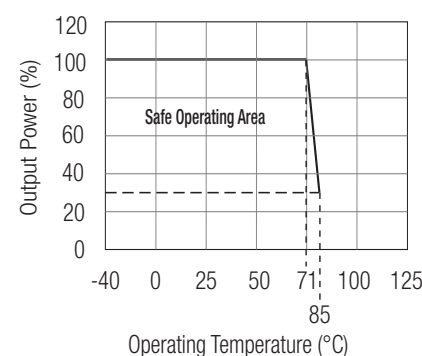


**E-358085**

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

**REC7.5**  
(customized)

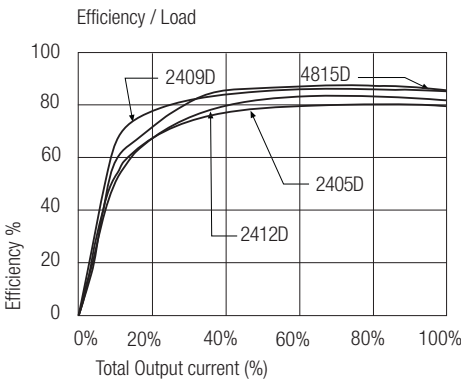
## Derating-Graph (Ambient Temperature)



Refer to Application Notes

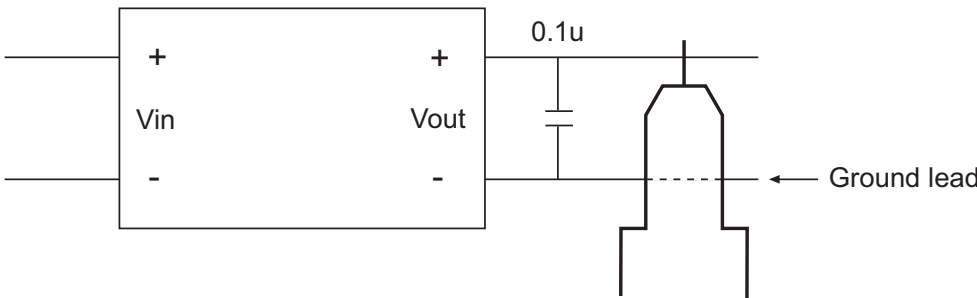
Typical Characteristics

Dual

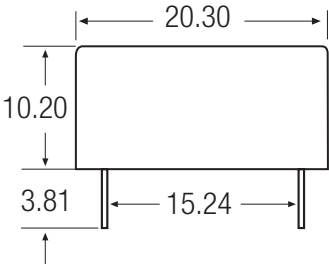
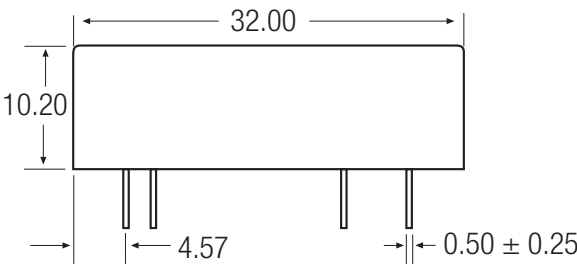


Note

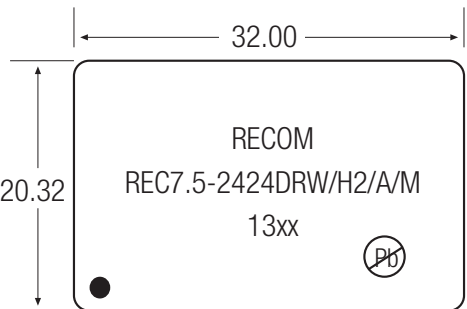
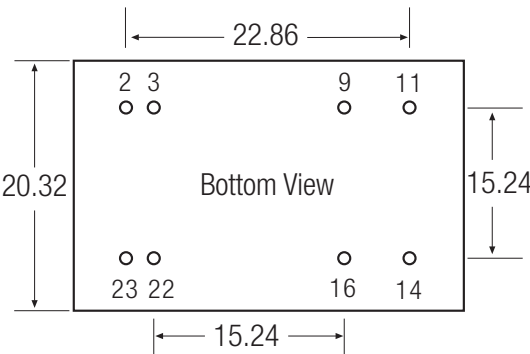
Measured with 20MHz bandwidth and 0.1uF ceramic capacitor



Package Style and Pinning (mm)



3rd angle projection



Pin Connections DIP24

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

NC = No Connection  
Tolerance = ± 0.25mm