

## Features

### Regulated Converters

- 10W 1" x 2" Package (50.8x25.4x11.27mm)
- 1kVDC Isolation
- Wide Input 2:1 & 4:1
- Regulated Output
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Remote ON/OFF-Control for Single Types
- Efficiency to 82%

### Selection Guide

| Part Number     | Input Voltage (VDC) | Output Voltage (VDC) | Output Current (mA) | Efficiency (%) |
|-----------------|---------------------|----------------------|---------------------|----------------|
| REC10-xx05SRWL  | 9-18, 18-36, 36-72  | 5                    | 2.000               | 78             |
| REC10-xx12SRWL  | 9-18, 18-36, 36-72  | 12                   | 830                 | 81             |
| REC10-xx15SRWL  | 9-18, 18-36, 36-72  | 15                   | 670                 | 81             |
| REC10-xx24SRWL  | 9-18, 18-36, 36-72  | 24                   | 416                 | 82             |
| REC10-xx05DRWL  | 9-18, 18-36, 36-72  | ±5                   | ±1.000              | 78             |
| REC10-xx12DRWL  | 9-18, 18-36, 36-72  | ±12                  | ±416                | 81             |
| REC10-xx15DRWL  | 9-18, 18-36, 36-72  | ±15                  | ±333                | 82             |
| REC10-xx05SRWLZ | 9-36, 18-72         | 5                    | 2.000               | 79             |
| REC10-xx12SRWLZ | 9-36, 18-72         | 12                   | 830                 | 80             |
| REC10-xx15SRWLZ | 9-36, 18-72         | 15                   | 670                 | 81             |
| REC10-xx24SRWLZ | 9-36, 18-72         | 24                   | 416                 | 79             |
| REC10-xx05DRWLZ | 9-36, 18-72         | ±5                   | ±1.000              | 78             |
| REC10-xx12DRWLZ | 9-36, 18-72         | ±12                  | ±416                | 81             |
| REC10-xx15DRWLZ | 9-36, 18-72         | ±15                  | ±333                | 81             |

**2:1**      **4:1**      \* add suffix "CTRL" for optional Remote ON/OFF-Control  
xx = 9-18Vin = 12      xx = 9-36Vin = 24  
xx = 18-36Vin = 24      xx = 18-72Vin = 48  
xx = 36-72Vin = 48

### Specifications (Core Operating Area)

|                                                   |                                                                |                            |                             |
|---------------------------------------------------|----------------------------------------------------------------|----------------------------|-----------------------------|
| Input Voltage Range                               |                                                                | 2:1 & 4:1                  |                             |
| Output Voltage Accuracy                           |                                                                | ±2% max.                   |                             |
| Line Voltage Regulation                           |                                                                | ±0.2% max.                 |                             |
| Load Voltage Regulation (10% to 100% full load )  |                                                                | ±0.2% max.                 |                             |
| Output Ripple and Noise (at 20MHz BW)             |                                                                | 100mVp-p max.              |                             |
| Operating Frequency                               |                                                                | 200kHz typ.                |                             |
| Efficiency at Full Load                           |                                                                | 75% max.                   |                             |
| Isolation Voltage                                 | (tested for 1 second)                                          | 1.000VDC min.              |                             |
| Rated Working Voltage                             | (long term isolation)                                          | see Application Notes      |                             |
| Isolation Capacitance                             |                                                                | 500pF max                  |                             |
| Isolation Resistance                              |                                                                | 1 GΩ min.                  |                             |
| Short Circuit Protection                          |                                                                | Continuous                 |                             |
| Operating Temperature Range (free air convection) |                                                                | -25°C to +70°C (see Graph) |                             |
| Storage Temperature Range                         |                                                                | -55°C to +100°C            |                             |
| Relative Humidity                                 | MSL Level 1                                                    | 95% RH                     |                             |
| Case Material                                     |                                                                | Metal Case                 |                             |
| Package Weight                                    |                                                                | 31.2 g                     |                             |
| MTBF (+25°C)                                      | } Detailed Information see<br>Application Notes chapter "MTBF" | using MIL-HDBK 217F        | 700 x 10 <sup>3</sup> hours |
| (+70°C)                                           |                                                                | using MIL-HDBK 217F        | 560 x 10 <sup>3</sup> hours |

**ECONOLINE**

DC/DC-Converter

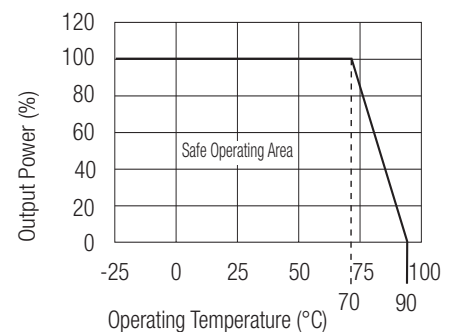
## REC10-S\_DRWL(Z) Series

**10 Watt  
1" x 2"  
Single &  
Dual Output**



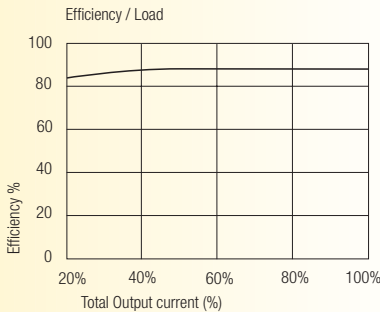
**RECOM**

### Derating-Graph (Ambient Temperature)



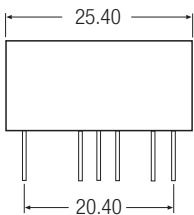
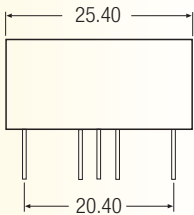
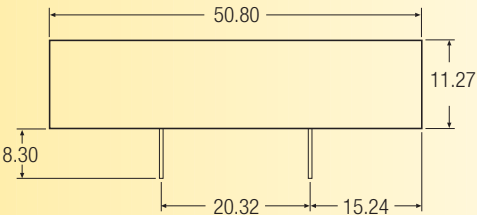
Typical Characteristics

REC10 - types

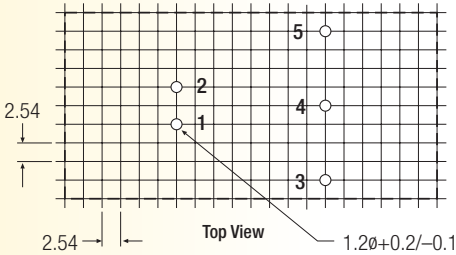
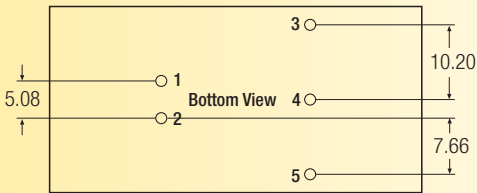


Package Style and Pinning (mm) 1" x 2", Wide Input 2:1 & 4:1

1" x 2" PIN Package



Recommended Footprint Details



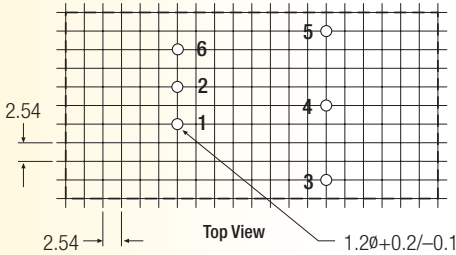
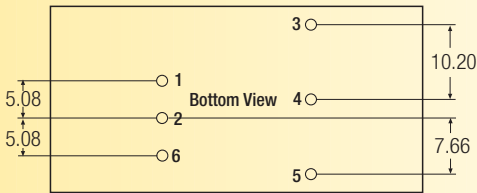
Pin Connections

| Pin # | Single | Dual   |
|-------|--------|--------|
| 1     | + Vin  | + Vin  |
| 2     | - Vin  | - Vin  |
| 3     | + Vout | + Vout |
| 4     | No Pin | Com    |
| 5     | - Vout | - Vout |

XX.X ± 0.5 mm  
XX.XX ± 0.25 mm

REC10-Series also available with Remote ON/OFF - Control  
For detailed information please contact your RECOM representative.

Recommended Footprint Details



Pin Connections

| Pin # | Single        |
|-------|---------------|
| 1     | + Vin         |
| 2     | - Vin         |
| 3     | + Vout        |
| 4     | No Pin        |
| 5     | - Vout        |
| 6     | Remote ON/OFF |

XX.X ± 0.5 mm  
XX.XX ± 0.25 mm