

## Features

### Regulated Converters

- 10W 1" x 2" Package (50.1x25.4x10.8mm)
- 1.6kVDC 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 84%

### Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
REC10-xx3.3SRW/H	9-18, 18-36, 36-75	3.3	2000	74-76
REC10-xx05SRW/H	9-18, 18-36, 36-75	5	2000	80-81
REC10-xx12SRW/H	9-18, 18-36, 36-75	12	830	81-84
REC10-xx15SRW/H	9-18, 18-36, 36-75	15	670	82-84
REC10-xx24SRW/H	9-18, 18-36, 36-75	24	420	81-84
REC10-xx3.3SRWZ/H	9-36, 18-75	3.3	2000	74
REC10-xx05SRWZ/H	9-36, 18-75	5	2000	77-80
REC10-xx12SRWZ/H	9-36, 18-75	12	830	81-82
REC10-xx15SRWZ/H	9-36, 18-75	15	670	80-82
REC10-xx3.3DRWZ/H	9-36, 18-75	±3.3	±1000	74
REC10-xx05DRWZ/H	9-36, 18-75	±5	±1000	77-80
REC10-xx12DRWZ/H	9-36, 18-75	±12	±416	81-82
REC10-xx15DRWZ/H	9-36, 18-75	±15	±333	80-82

#### 2:1

xx = 9-18Vin = 12  
xx = 18-36Vin = 24  
xx = 36-75Vin = 48

#### 4:1

xx = 9-36Vin = 24  
xx = 18-75Vin = 48

\* add suffix "/CTRL" for optional Remote ON/OFF-Control

### Specifications (Core Operating Area)

Input Voltage Range	2:1 & 4:1	
Input Filter	$\pi$ type	
Output Voltage Accuracy	±2% max.	
Line Voltage Regulation	±0.5% max.	
Load Voltage Regulation (10% to 100% full load)	±1% max.	
Minimum Load	3.3, 5V, ±3.3, ±5Vout 12, 15, 24, ±12, ±15Vout	3% 0%
Ripple	<0.2% Vout +40mVp-p max.	
Noise	<0.5% Vout +50mVp-p max.	
Operating Frequency	300kHz typ.	
Over Power Protection	120%, automatic recovery	
Over Voltage Protection	Zener diode clamp	
Short Circuit Protection	Current limit, auto-recovery	
Efficiency at Full Load	85% max.	
Isolation Voltage	(tested for 1 second)	1600VDC min.
Rated Working Voltage	(long term isolation)	see Application Notes
Isolation Capacitance	1000pF	
Isolation Resistance	100 M $\Omega$ min.	

continued on next page

## ECONOLINE

DC/DC-Converter

# REC10-S\_DRW(Z)/H Series

10 Watt

1" x 2"

Single & Dual Output

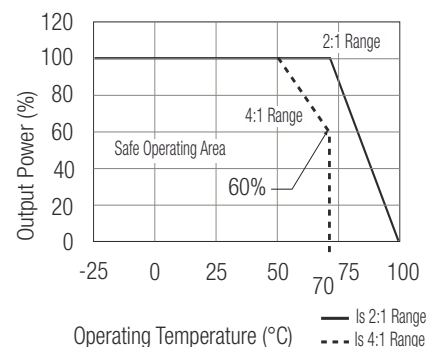


Designed to meet EN-60950-1

UL-60950-1 Pending

# RECOM

## Derating-Graph (Ambient Temperature)

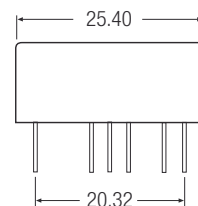
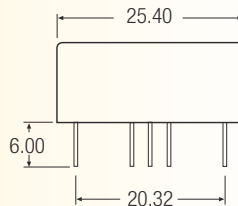
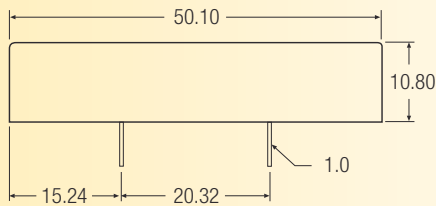


**Specifications (Core Operating Area) cont.**

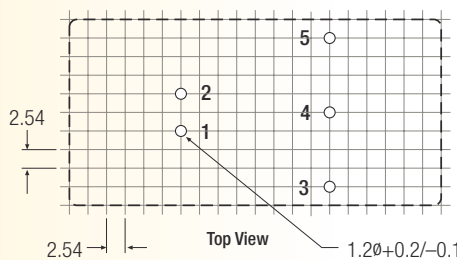
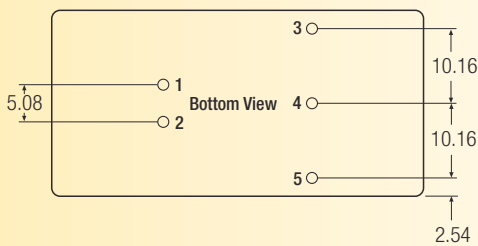
Operating Temperature Range (Natural convection)	2:1	-25°C to +70°C (see Graph)	
(with derating)	4:1	-25°C to +70°C (see Graph)	
Storage Temperature Range		-55°C to +105°C	
Case Temperature		+100°C max.	
Temperature Coefficient		±0.02%/°C	
Relative Humidity		95% RH	
Case Material	Nickel Plated Copper with Non-Conductive Base, Six-side Shielded		
Cooling Method	Natural convection		
Package Weight	32g		
EMI (Conducted & Radiated Emission)	EN 55022 class A		
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	800 x 10 <sup>3</sup> hours
(+70°C)		using MIL-HDBK 217F	256 x 10 <sup>3</sup> hours

**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

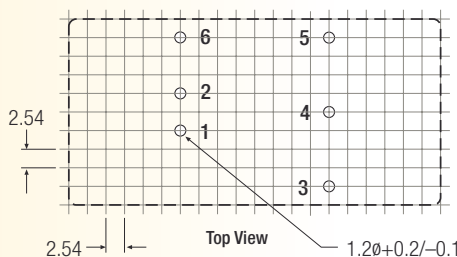
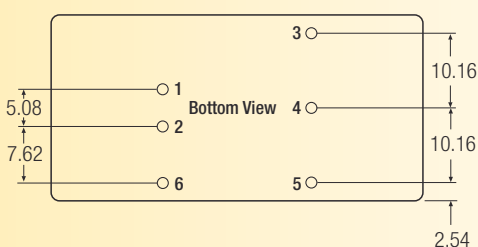
XX.X ± 0.5 mm  
XX.XX ± 0.25 mm

**REC10-Series also available with Remote ON/OFF - Control**

For order information please contact your RECOM representative.

REC10-S\_DRW(Z)/H/CTRL

Recommended Footprint Details



Pin Connections

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

XX.X ± 0.5 mm  
XX.XX ± 0.25 mm