

## Features

### Regulated Converters

- 7.5W DIP24 and SMD Package
- 1KVDC, 2KVDC and 3kVDC Isolation Options
- UL94V-0 Package Material
- Continuous Short Circuit Protection Auto-Restarting
- Wide Input Voltage Range 2:1
- 5 Side Shielded Metal Case
- Full SMD design
- 100% Burned In
- Efficiency to 86%

### Selection Guide

Part Number (VDC)	Input Voltage (VDC)	Output Voltage (VDC)	Max. Cap. Load (µF)	Output Current (mA)	Efficiency DIP24 (%)
REC7.5-xx3.3SRW/H*/AM	9-18, 18-36, 36-72	3.3	3300	1.800	78
REC7.5-xx05SRW/H*/AM	9-18, 18-36, 36-72	5	2200	1.500	81-82
REC7.5-xx09SRW/H*/AM	9-18, 18-36, 36-72	9	680	833	83-84
REC7.5-xx12SRW/H*/AM	9-18, 18-36, 36-72	12	330	625	84-85
REC7.5-xx15SRW/H*/AM	9-18, 18-36, 36-72	15	220	500	85-86
REC7.5-xx05DRW/H*/AM	9-18, 18-36, 36-72	±5	±1000	±750	81-82
REC7.5-xx09DRW/H*/AM	9-18, 18-36, 36-72	±9	±330	±417	83-84
REC7.5-xx12DRW/H*/AM	9-18, 18-36, 36-72	±12	±160	±312	84-85
REC7.5-xx15DRW/H*/AM	9-18, 18-36, 36-72	±15	±100	±250	85-86

#### 2:1

xx = 9-18Vin = 12V,  
xx = 18-36Vin = 24,  
xx = 36-72Vin = 48

**/H3/AM/SMD combination is not allowed**

- \* add suffix /H1 for 1kVDC Isolation, /H2 for 2kVDC Isolation or /H3 for 3kVDC Isolation
- \* /H3 version is not available in /AM/SMD combination
- \* add suffix /SMD for SMD package, e.g. REC7.5-2405DRW/H1/AM/SMD
- \* no plastic case is available for REC7.5

### Specifications (Core Operating Area)

Input Voltage Range	2:1		
Output Voltage Accuracy	±2% max.		
Line Voltage Regulation	0.4% max.		
Load Voltage Regulation (25% to 100% full load )	0.8% max.		
Output Ripple and Noise (at 20MHz BW)	3.3V output type	100mVp-p max.	
	5, 9, 12 and 15V output types	50mVp-p max.	
Operating Frequency	120kHz typ.		
Efficiency at Full Load	see Selection Guide		
Isolation Voltage	H1 types	(tested for 1 second)	1000VDC min.
Isolation Voltage	H2 types	(tested for 1 second)	2000VDC min.
Isolation Voltage	H3 types	(tested for 1 second)	3000VDC min.
Rated Working Voltage	(long term isolation)		see Application Note
Isolation Capacitance	50pF typ.		
Isolation Resistance	1 GΩ min.		
Short Circuit Protection	Continuous, Auto Restart		
Operating Temperature Range (free air convection)	-40°C to +71°C (see Graph)		
Storage Temperature Range	-55°C to +125°C		
Relative Humidity	95% RH		
Case Material	Nickel Plated Metal with Non-Conductive Base		
Package Weight	16g		
MTBF (+25°C)	Detailed Information see	using MIL-HDBK 217F	800 x 10 <sup>3</sup> hours
(+71°C)	Application Notes chapter "MTBF"	using MIL-HDBK 217F	>200 x 10 <sup>3</sup> hours

## ECONOLINE

DC/DC-Converter

# REC7.5-S<sub>DRW/H\*</sub>/AM Series

## 7.5 Watt DIP24 & SMD Single & Dual Output



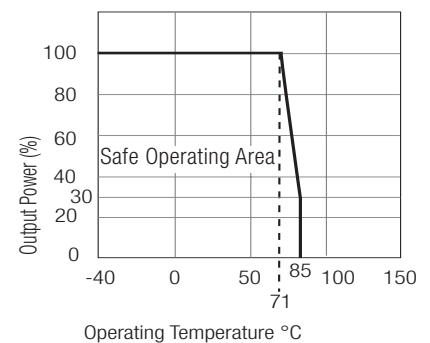
**EN-60950-1 Certified**  
**EN-60601-1 Certified**  
**(Suffix H3)**  
**UL-60950-1 Certified**

### Description

The REC7.5-xxxxSRW/DRW-series a wide input voltage range of DC/DC converters offering single and dual regulated outputs. 24-pin DIP and high efficiency allows an operating temperature of -40°C to +71°C.

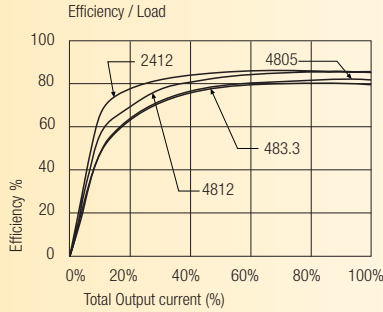


## Derating-Graph (Ambient Temperature)

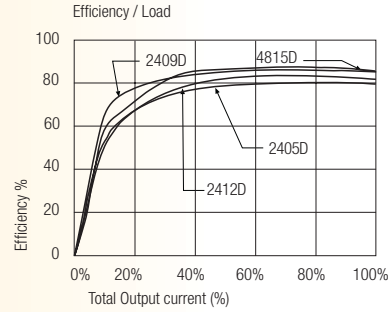


**Typical Characteristics**

### Single

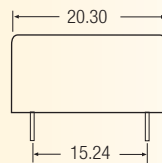
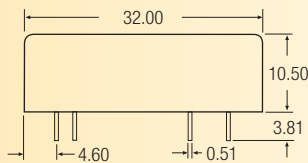


### Dual



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

#### 24 PIN DIP Package



#### Pin Connections DIP24

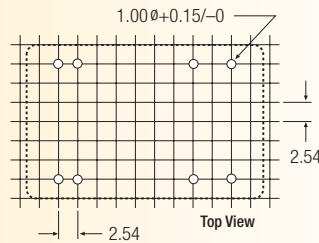
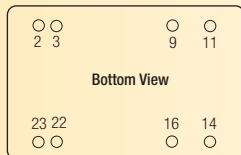
Pin #	Single	Dual
2	-Vin	-Vin
3	-Vin	-Vin
9	NC	Com
11	NC	-Vout
14	+Vout	+Vout
16	-Vout	Com
22	+Vin	+Vin
23	+Vin	+Vin

NC = No Connection

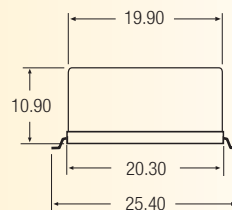
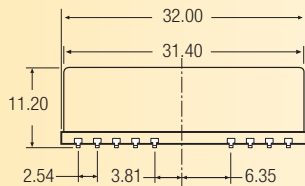
XX.X ± 0.5 mm

XX.XX ± 0.25 mm

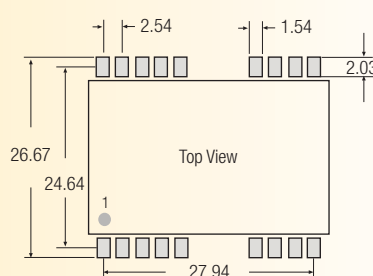
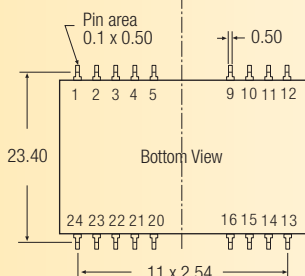
#### Recommended Footprint Details



#### 24 PIN SMD Package



#### Recommended Footprint Details



All unused pins are NC (No Connection). SMD pin connections follow the standard package pinning. See Notes for restrictions on /H3 SMD versions.

Tol: ± 0.25 mm