

## Features

### Regulated Converters

- 1.5W/1.8W in Mini DIP and SMD Packages
- 1KVDC Isolation
- Regulated Output
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Internal SMD design
- 100% Burned In
- Efficiency to 70%

## ECONOLINE

DC/DC-Converter

# REC1.5- & REC1.8-SR/H1 Series

## 1.5/1.8 Watt DIP24 minia- ture & SMD Single Output

### Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)
DIP24 miniature (/SMD)	(VDC)	(VDC)	(mA)
REC1.5-xx3.3SR/H1	5, 12, 24	3.3	450
REC1.5-xx05SR/H1	5, 12, 24	5	300
REC1.5-xx09SR/H1	5, 12, 24	9	166
REC1.5-xx12SR/H1	5, 12, 24	12	125
REC1.5-xx15SR/H1	5, 12, 24	15	100
REC1.8-xx3.3SR/H1	5, 12, 24	3.3	500
REC1.8-xx05SR/H1	5, 12, 24	5	360
REC1.8-xx09SR/H1	5, 12, 24	9	200
REC1.8-xx12SR/H1	5, 12, 24	12	150
REC1.8-xx15SR/H1	5, 12, 24	15	120

\* add suffix "/SMD" for SMD package, e.g. REC1.5-0505SR/H1/SMD

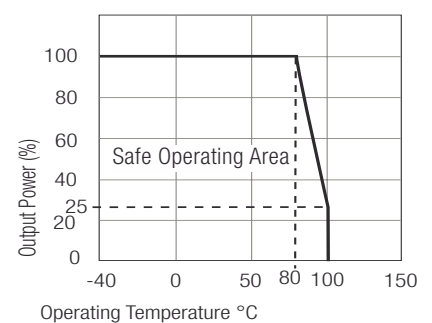
\* add suffix "/M" for Metal Case, e.g. REC1.5-0505SR/H1/M



### Specifications (Core Operating Area)

Input Voltage Range		±15% max	
Output Voltage Accuracy		±3% max.	
Line Voltage Regulation		±0.4% max	
Load Voltage Regulation (10% to 100% full load )		±0.8% max.	
Output Ripple and Noise (at 20MHz BW)		100mVp-p max.	
Operating Frequency		85kHz min.	
Efficiency		65% min.	
No Load Power Consumption		200mW max.	
Isolation Voltage	(tested for 1 second)	1000VDC min.	
Rated Working Voltage	(long term isolation)	see Application Notes	
Isolation Capacitance		20pF min. / 60pF max.	
Isolation Resistance		1 GΩ min.	
Short Circuit Protection		Continuous	
Short Circuit Protection	-40°C to +80°C (see Graph)		
Storage Temperature Range		-50°C to +125°C	
Temperature Coefficient		±0.02%/°C	
Relative Humidity		95% RH	
Thermal Impedance	Natural convection	20°C/W for metal case	
Package Weight		8.5g	
MTBF (+25°C)	} Detailed information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	1000 x 10 <sup>3</sup> hours
(+80°C)		using MIL-HDBK 217F	150 x 10 <sup>3</sup> hours

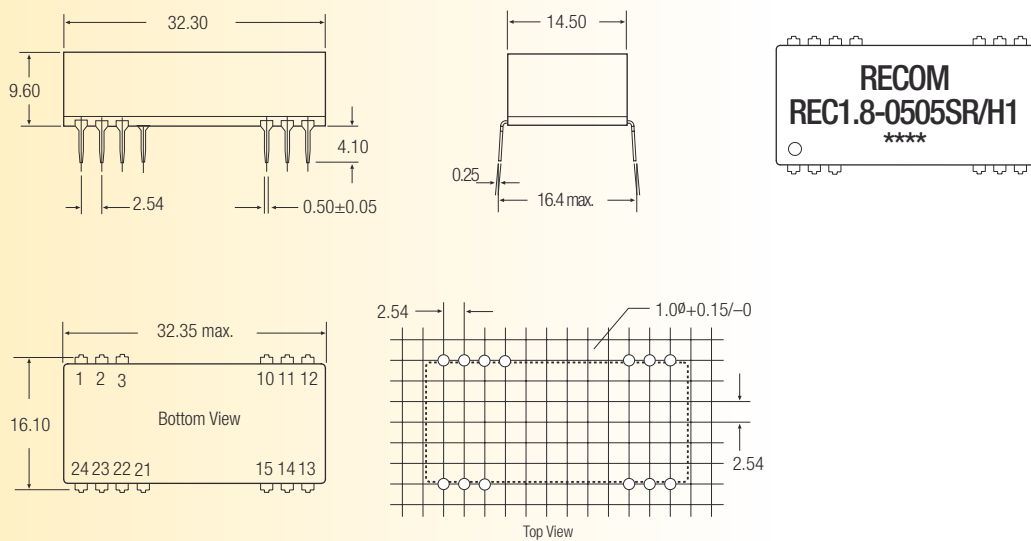
## Derating-Graph (Ambient Temperature)



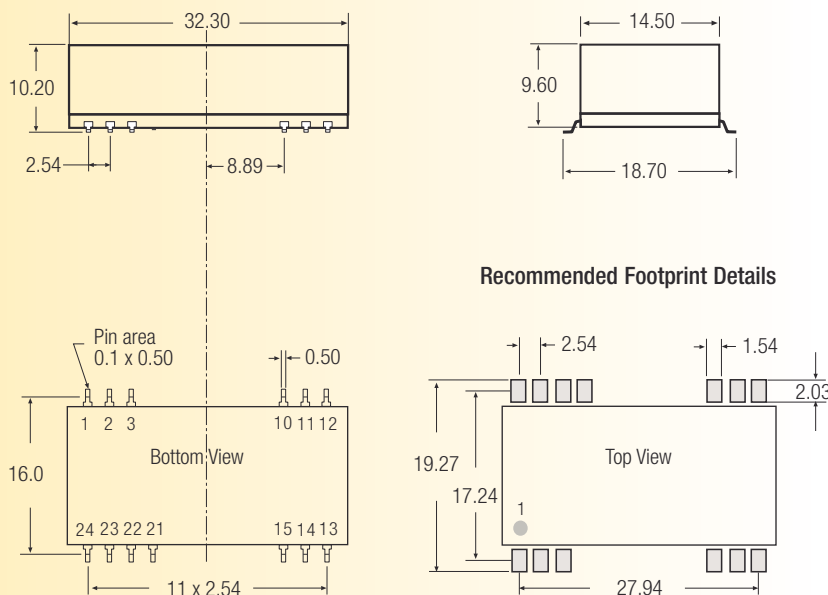
**Package Style and Pinning (mm)**



**24 PIN DIP Miniature Package**



**24 PIN DIP SMD Package**



**Pin Connections**

Pin #	Single
1 & 24	+Vin
2 & 23	NC
3 & 21	NC
22	NC
10 & 15	-Vout
11 & 14	+Vout
12 & 13	-Vin
NC = No Connection	

XX.X ± 0.5 mm  
XX.XX ± 0.25 mm