

Features

Regulated Converters

- 2.2W DIP Package
- 1kVDC Isolation
- Regulated Output
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Internal SMD design
- 100% Burned In
- Efficiency to 75%

Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Max Cap. Load (μF)	Output Current (mA)
DIP24 (SMD)				
REC2.2-xx3.3SR/H1	5, 12, 24, 48	3.3	1000	600
REC2.2-xx05SR/H1	5, 12, 24, 48	5	470	440
REC2.2-xx09SR/H1	5, 12, 24, 48	9	220	244
REC2.2-xx12SR/H1	5, 12, 24, 48	12	120	183
REC2.2-xx15SR/H1	5, 12, 24, 48	15	100	146
REC2.2-xx05DR/H1	5, 12, 24, 48	±5	±220	±220
REC2.2-xx09DR/H1	5, 12, 24, 48	±9	±100	±122
REC2.2-xx12DR/H1	5, 12, 24, 48	±12	±68	±92
REC2.2-xx15DR/H1	5, 12, 24, 48	±15	±47	±73

xx = Input Voltage

* add suffix "/SMD" for SMD package, e.g. REC2.2-0505SR/H1/SMD

* add suffix "/M" for Metal Case, e.g. REC2.2-0505SR/H1/M

Specifications (Core Operating Area)

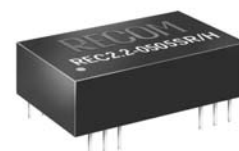
Input Voltage Range	±15%		
Output Voltage Accuracy	±3% typ.		
Line Voltage Regulation	±0.5% max		
Load Voltage Regulation (10% to 100% full load)	±1% max.		
Output Ripple and Noise (at 20MHz BW)	100mVp-p max.		
Operating Frequency	75kHz min.		
Efficiency at Full Load	65% min.		
No Load Power Consumption	200mW max.		
Isolation Voltage	(tested for 1 second)	1000VDC min.	
Rated Working Voltage	(long term isolation)	see Application Notes	
Isolation Capacitance	30pF typ.		
Isolation Resistance	1 GΩ min.		
Short Circuit Protection	Continuous		
Operating Temperature Range (free air convection)	-40°C to +80°C (see Graph)		
Storage Temperature Range	-50°C to +125°C		
Relative Humidity	95% RH		
Thermal Impedance	Natural convection	20°C/W for metal case	
Package Weight	12g		
MTBF (+25°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	1000 x 10³ hours
(+80°C)		using MIL-HDBK 217F	150 x 10³ hours

ECONOLINE

DC/DC-Converter

REC2.2-S_DR/H1 Series

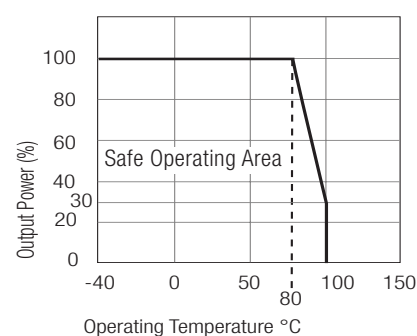
2.2 Watt DIP24 & SMD Single & Dual Output



UL-60950-1 Certified

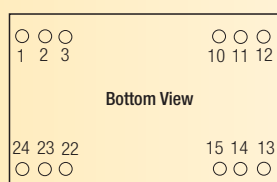
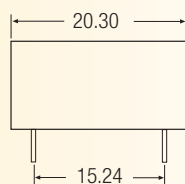
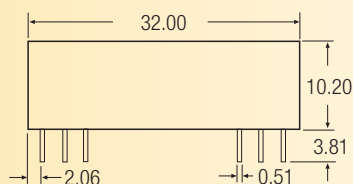


Derating-Graph (Ambient Temperature)

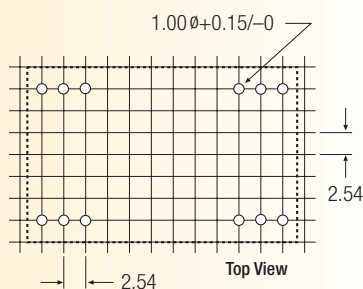


Package Style and Pinning (mm)

24 PIN DIP Package



Recommended Footprint Details



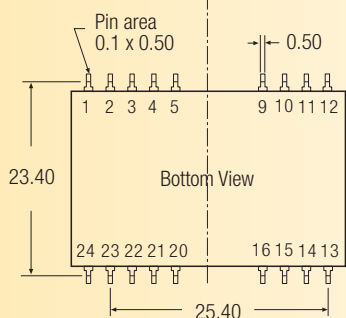
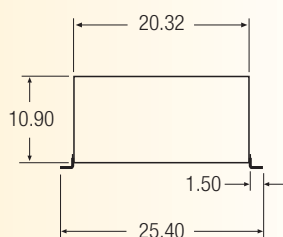
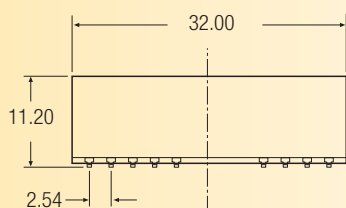
Pin Connections

Pin #	Single	Dual
1	+Vin	+Vin
2	No Pin	-Vout
3	No Pin	Com
10	-Vout	Com
11	+ Vout	+ Vout
12	-Vin	-Vin
13	-Vin	-Vin
14	+ Vout	+ Vout
15	-Vout	Com
22	No Pin	Com
23	No Pin	-Vout
24	+Vin	+Vin

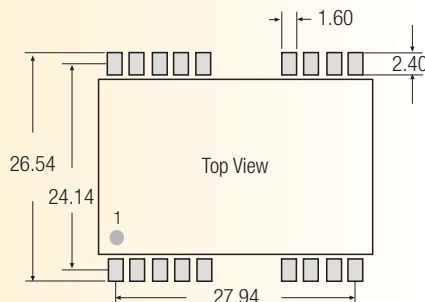
XX.X ± 0.5 mm

XX.XX ± 0.25 mm

24 PIN DIP SMD Package



Recommended Footprint Details



**All unused pins are
NC (No Connection).
SMD pin connections
follow standard
package pinning.**

XX.X ± 0.5 mm

XX.XX ± 0.25 mm