Features

Regulated Converters

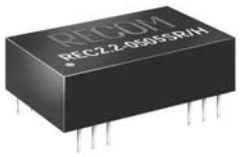
- 2.2W DIP Package
- 1kVDC Isolation
- Regulated Output
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Internal SMD design
- 100% Burned In
- Efficiency to 75%

ECONOLINE

DC/DC-Converter

REC2.2-S_DR/H1 Series

2.2 Watt DIP24 & SMD Single & Dual Output



UL-60950-1 Certified

RECOM

Selection Guide

Part Number	Input Voltage	Output Voltage	Max Cap. Load	Output Current
DIP24 (SMD)	(VDC)	(VDC)	(µF)	(mA)
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

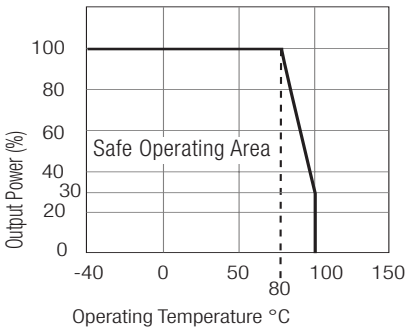
* add suffix "**/M**" for Metal Case, e.g. REC2.2-0505SR/H1/M

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*	using MIL-HDBK 217F	1000 x 10^3 hours
(+80°C) *Application Notes chapter "MTBF"*	using MIL-HDBK 217F	150 x 10^3 hours

Derating-Graph

(Ambient Temperature)

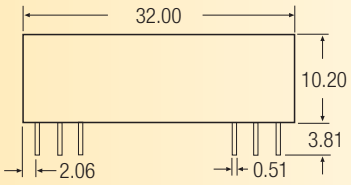


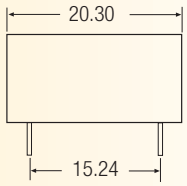
REC2.2-S_DR/H1 Series

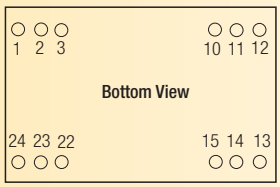
Package Style and Pinning (mm)

3rd angle projection

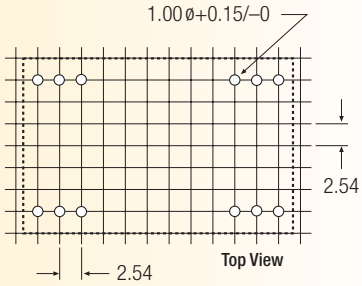
24 PIN DIP Package







Recommended Footprint Details

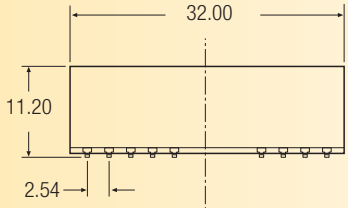


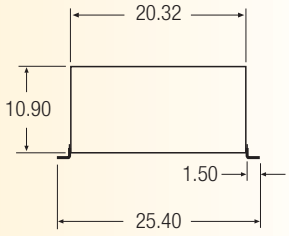
Pin Connections

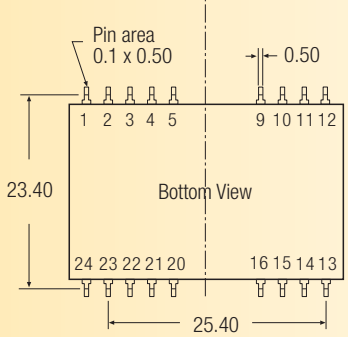
Pin #	Single	Dual
1	+Vin	+Vin
2	No Pin	–Vout
3	No Pin	Com
10	–Vout	Com
11	+ Vout	+ Vout
12	–Vin	–Vin
13	–Vin	–Vin
14	+ Vout	+ Vout
15	–Vout	Com
22	No Pin	Com
23	No Pin	–Vout
24	+Vin	+Vin

XX.X ± 0.5 mm
XX.XX ± 0.25 mm

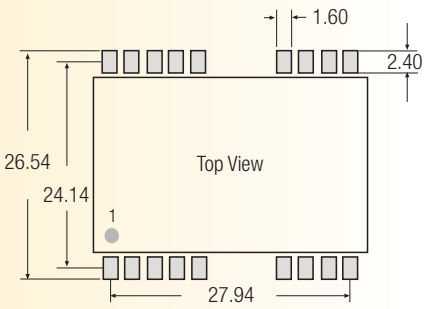
24 PIN DIP SMD Package







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