

Features

Regulated Converters

- 20W 1" x 2" Package (50.1x25.4x10.8mm)
- 1.6kVDC Isolation
- Wide Input 2:1
- Regulated Output
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Remote ON/OFF-Control for Single Types
- Efficiency to 87%

Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)
1" x 2"	(VDC)	(VDC)	(mA)	(%)
REC20-xx2.5SRW/H	18-36, 36-75	2.5	4000	83
REC20-xx3.3SRW/H	18-36, 36-75	3.3	4000	86
REC20-xx05SRW/H	18-36, 36-75	5	4000	87

2:1

xx = 18-36Vin = 24

xx = 36-75Vin = 48

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

Specifications (Core Operating Area)

Input Voltage Range	2:1		
Input Filter	π type		
Output Voltage Accuracy	$\pm 2\%$ max.		
Line Voltage Regulation	$\pm 0.5\%$ max.		
Load Voltage Regulation (10% to 100% full load)	$\pm 1\%$ max.		
Ripple	110mVp-p max.		
Noise	200mVp-p max.		
Operating Frequency	400kHz typ.		
Over Power Protection	Works over 120% of rating and recovers automatically		
Over Voltage Protection	Zener diode clamp		
Short Circuit Protection	Current limit, auto-recovery		
Transient Response	≤ 500 us (100% to 50% full load at $\pm 1\%$ error band)		
Efficiency at Full Load	87% 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 Ω min.		
Operating Temperature Range (Natural convection)	(with derating)	-25°C to +70°C (see Graph)	
Storage Temperature Range	-55°C to +105°C		
Case Temperature	+100°C max.		
Temperature Coefficient	$\pm 0.02\%/^{\circ}\text{C}$		
Relative Humidity	MSL Level 1	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	>550 x 10 ³ hours
(+40°C)		using MIL-HDBK 217F	193 x 10 ³ hours

ECONOLINE

DC/DC-Converter

REC20-SRW/H Series

20 Watt
1" x 2"
Single Output

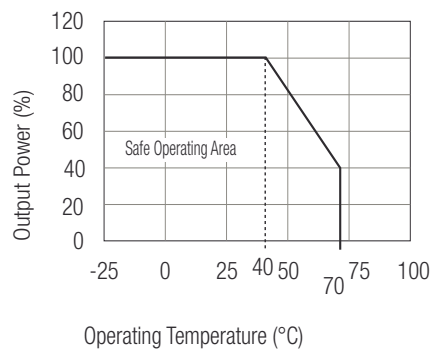


Designed to meet EN-60950-1

UL-60950-1 Pending

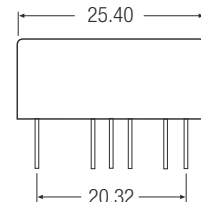
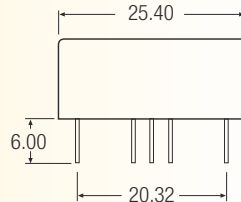
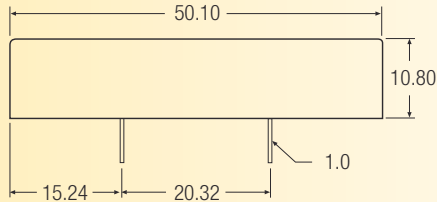
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Derating-Graph (Ambient Temperature)

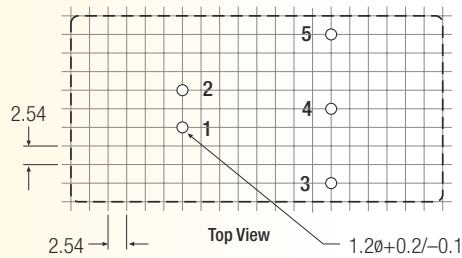
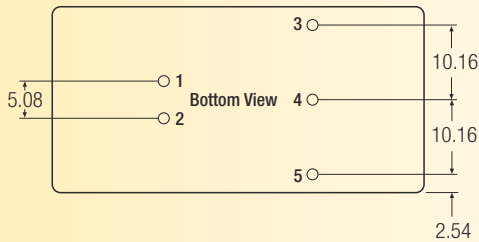


Package Style and Pinning (mm) 1" x 2", Wide Input 2:1

1" x 2" PIN Package



Recommended Footprint Details



Pin Connections

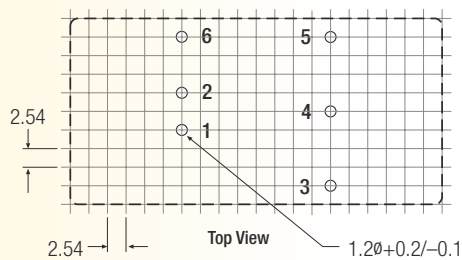
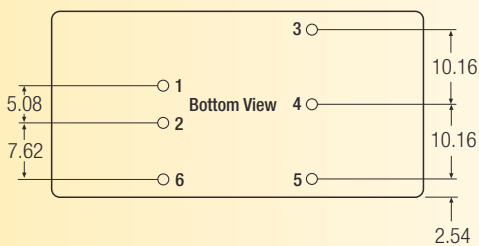
Pin #	Single
1	+Vin
2	-Vin
3	+Vout
4	No Pin
5	-Vout
XX.X ± 0.5 mm	
XX.XX ± 0.25 mm	

REC20-Series also available with Remote ON/OFF - Control

For detailed information please contact your RECOM representative.

REC20-SRW/H/CTRL

Recommended Footprint Details



Pin Connections

Pin #	Single
1	+Vin
2	-Vin
3	+Vout
4	No Pin
5	-Vout
6	CTRL
XX.X ± 0.5 mm	
XX.XX ± 0.25 mm	