Features

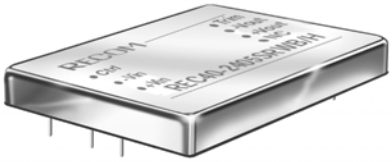
Regulated Converters

- 40W 2"x 2" Package (50.8x11.40x50.8mm)
- 1.6kVDC Isolation
- Wide Input 2:1
- Regulated Output
- UL94V-0 Package Material
- Continuous Short Circuit Protection
- Vout Trim and ON/OFF Control Function
- Efficiency to 87%

ECONOLINE
DC/DC-Converter

REC40-S_D_TRWB/H Series

40 Watt 2" x 2" Single, Dual & Triple Output



Designed to meet EN-60950-1

Selection Guide

Part Number 2" x 2"	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency 12/24/48 (%)
REC40-xx05SRWB/H	9-18, 18-36, 36-75	5	8000	85/87/88
REC40-xx12SRWB/H	9-18, 18-36, 36-75	12	3333	85/86/87
REC40-xx15SRWB/H	9-18, 18-36, 36-75	15	2666	85/86/87
REC40-xx24SRWB/H	9-18, 18-36, 36-75	24	1666	85/86/87
REC40-xx05DRWB/H	9-18, 18-36, 36-75	±5	±3500	82/83/84
REC40-xx12DRWB/H	9-18, 18-36, 36-75	±12	±1666	85/86/87
REC40-xx15DRWB/H	9-18, 18-36, 36-75	±15	±1320	85/86/87
REC40-xx0512TRWB/H	9-18, 18-36, 36-75	5/±12	5000/±600	85/86/87
REC40-xx0515TRWB/H	9-18, 18-36, 36-75	5/±15	5000/±500	85/86/87

2:1
xx = 9-18Vin = 12
xx = 18-36Vin = 24
xx = 36-75Vin = 48

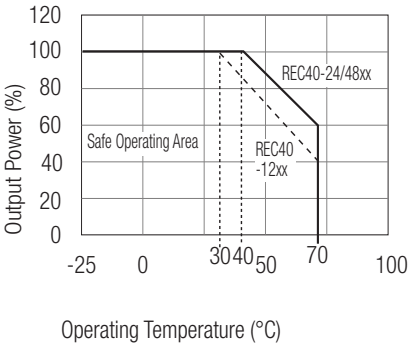
* add suffix "CTRL" for optional Remote ON/OFF-Control

Specifications (Core Operating Area)

Input Voltage Range		2:1
Input Filter		π type
Output Voltage Accuracy		±2% max.
Line Voltage Regulation	Single & Dual	±0.5% max.
	Triple Output	±1%/±5%
Load Voltage Regulation (10% to 100% full load)	Single Output	±1% max.
	Dual Output	±2% max.
	Triple Output	±3%/±5%
Minimum Load	Single/Dual Output	0%
	Triple Output	10%
Ripple	Single Output	±1% max.
	All Others	<0.2% Vout +20mVp-p max.
Noise	Single Output	100mV min., ±1% max.
	All Others	<0.5% Vout +50mVp-p max.
Trim		±10%
Operating Frequency	REC40-12xx	200kHz typ.
	REC40-1205	250kHz typ.
	REC40-24xx/48xx	400kHz typ.
Over Power Protection		Works over 120% of rating and recovers automatically
Over Voltage Protection		Zener diode clamp
Short Circuit Protection		Hiccup, auto-recovery
Efficiency at Full Load		see table

Continued on next page

Derating-Graph
(Ambient Temperature)

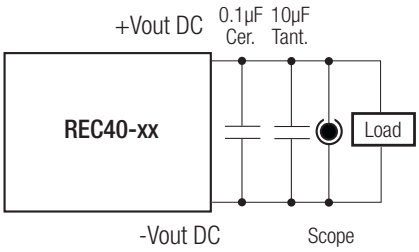


REC40-S_D_TRWB/H Series

Specifications (Core Operating Area)

Remote On/Off	DC-DC ON	open or 3.7V>Vr>5V
	DC-DC OFF	short to 0V or 0V>Vr>3.7V
Remote Off input current	Nominal Vin	5mA max.
Remote pin drive current	Vr=0V	-1.25mA max.
Isolation Voltage	(tested for 1 second)	1600VDC min.
Rated Working Voltage	(long term isolation)	see Application Notes
Isolation Capacitance		1000pF
Isolation Resistance		100 MΩ min.
Operating Temperature Range (Natural convectio,with derating)		-25°C to +70°C (see Graph)
Storage Temperature Range		-55°C to +105°C
Case Temperature		+100°C max.
Temperature Coefficient		±0.02%/°C
Relative Humidity		95% RH
Case Material	Nickel-Plated Copper with Non-Conductive Base, Six-side Shielded	
Cooling Method		Natural convection
Package Weight		70g
MTBF (+25°C) } *Detailed Information see*	using MIL-HDBK 217F	>550 x 10^3 hours
(+50°C) } *Application Notes chapter "MTBF"*	using MIL-HDBK 217F	187 x 10^3 hours

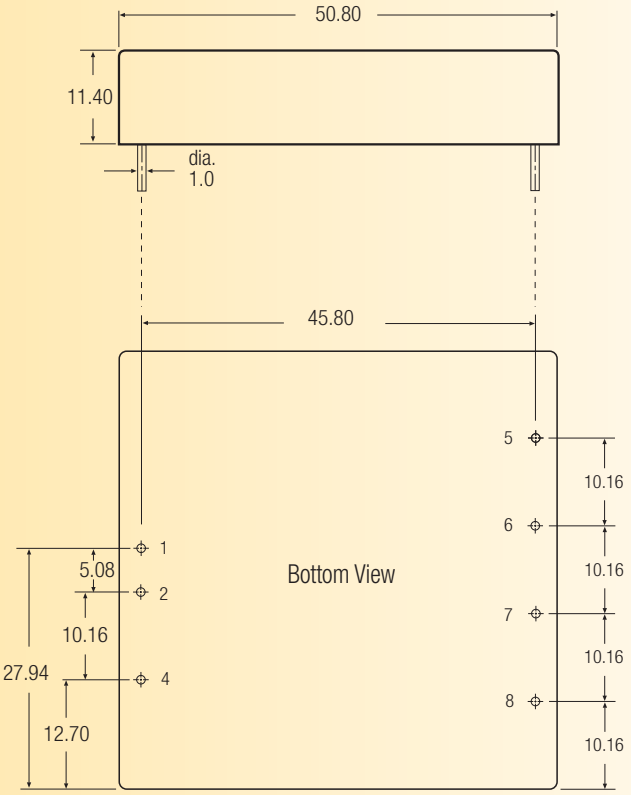
Noise Measurement

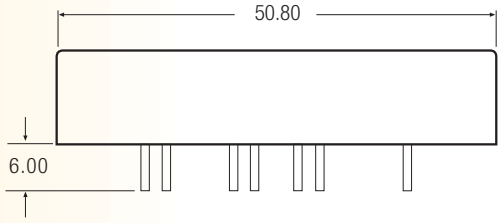


Package Style and Pinning (mm) 2" x 2" , Wide Input 2:1

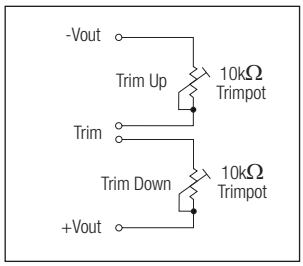
2" x 2" PIN Package

3rd angle projection





Pin Connections

Pin #	Single	Dual	Triple
1	+Vin	+Vin	+Vin
2	–Vin	–Vin	–Vin
4	No Pin/CTRL	No Pin/CTRL	No Pin/CTRL
5	NC	+Vout	+Vout
6	+Vout	Com	+5Vout
7	–Vout	–Vout	Com
8	Trim	Trim	-Vout

XX.X ± 0.5 mm
XX.XX ± 0.25 mm