Features

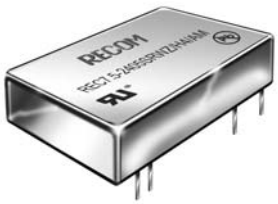
Regulated Converters

- 7.5W DIP24 Package
- 1KVDC, 2KVDC and 3kVDC Isolation Options
- Approved for Medical Applications (/H3)
- UL and EN Safety Approvals
- Continuous Short Circuit Protection (power limiting)
- 5 Side Shielded Metal Case
- Full SMD design
- 2 Case Style Options
- Remote Pin Option
- Efficiency to 86%

ECONOLINE
DC/DC-Converter

RECOM

7.5 Watt DIP24 & SMD Single & Dual Output



RoHS 2002/95/EC 6/6

E-224736

EN-60950-1 Certified
EN-60601-1 Certified (Suffix H3)
UL-60950-1 Certified

REC 7.5

Description

The REC7.5-xxxxSRW/DRW-series offer single and dual regulated outputs in a DIP24 package with 1kV, 2kV or 3kV options and are suitable for higher power industrial or medical applications. Remote on/off control is possible with the /CTRL option and SMD pinning is offered with the /SMD option. The converters can deliver 140% rated power for short periods of time to cope with applications with large capacitive loads or high start up currents.

Selection Guide

Part Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Efficiency (%)	Max. Cap. Load
REC7.5-xx3.3SRW/H*/A/M	9-18, 18-36, 36-72	3.3	1800	78	3300µF
REC7.5-xx05SRW/H*/A/M	9-18, 18-36, 36-72	5	1500	79-82	2200µF
REC7.5-xx09SRW/H*/A/M	9-18, 18-36, 36-72	9	833	81-84	680µF
REC7.5-xx12SRW/H*/A/M	9-18, 18-36, 36-72	12	625	82-85	330µF
REC7.5-xx15SRW/H*/A/M	9-18, 18-36, 36-72	15	500	83-86	220µF
REC7.5-xx05DRW/H*/A/M	9-18, 18-36, 36-72	±5	±750	79-82	±1000µF
REC7.5-xx09DRW/H*/A/M	9-18, 18-36, 36-72	±9	±417	81-84	±330µF
REC7.5-xx12DRW/H*/A/M	9-18, 18-36, 36-72	±12	±312	82-85	±160µF
REC7.5-xx15DRW/H*/A/M	9-18, 18-36, 36-72	±15	±250	83-86	±100µF

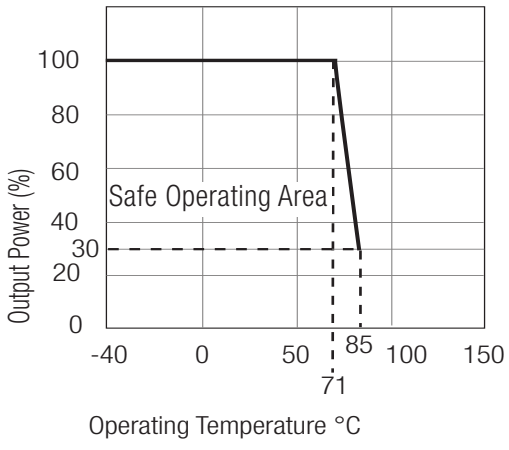
2:1
xx = 9-18Vin = 12V,
xx = 18-36Vin = 24,
xx = 36-72Vin = 48

* add suffix /H1 for 1kVDC Isolation, /H2 for 2kVDC isolation or /H3 for 3kVDC Isolation (not available in H3/A/M/SMD combination)
* add suffix "/SMD" for SMD package, e.g. REC7.5-2405DRW/H1/A/M/SMD
* add suffix "/CTRL" for Remote Pin option
* add suffix -R for Tape and Reel packaging
* no plastic case is available for REC7.5

Derating

Derating-Graph

(Ambient Temperature)



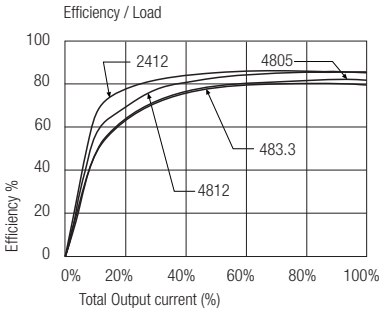
Refer to Application Notes

REC7.5-S_DRW/H*/A/M Series

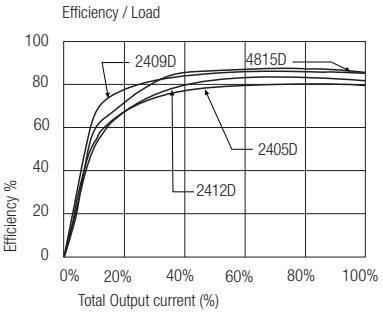
Specifications (measured at T_A = 25°C, nominal input voltage, full load and after warm-up)

Input Voltage Range			2:1
Output Voltage Accuracy			±2% max.
Line Voltage Regulation			0.4% max.
Load Voltage Regulation (25% to 100% full load)			0.8% max.
Output Ripple and Noise (at 20MHz BW)		3.3V output type	100mVp-p max.
		5, 9, 12 and 15V output types	50mVp-p max.
Operating Frequency (Full Load)			150kHz min. / 240kHz max.
Input Filter			PI Network
Efficiency at Full Load			see Selection Guide
No Load Power Consumption			300mW max.
Isolation Voltage	H1 types	(tested for 1 second)	1000VDC min.
Isolation Voltage	H2 types	(tested for 1 second)	2000VDC min.
Isolation Voltage	H3 types	(tested for 1 second)	3000VDC min.
Rated Working Voltage		(long term isolation)	see Application Note
Isolation Capacitance			50pFtyp.
Isolation Resistance			1 GΩ min.
Short Circuit Protection (Max temp. = 50°C during short circuit conditions)			Continuous, Auto Restart
Operating Temperature Range (free air convection)			-40°C to +71°C (see Graph)
Storage Temperature Range			-55°C to +125°C
Relative Humidity			95% RH
Case Material			Nickel Plated Metal with Non-Conductive Base
Thermal Impedance		Natural convection	12°C/W
Package Weight			16g
Packing Quantity			15 pcs per Tube 100 pcs per Reel
MTBF (+25°C) } *Detailed Information see*		using MIL-HDBK 217F	800 x 10^3hours
(+71°C) } *Application Notes chapter "MTBF"*		using MIL-HDBK 217F	>200 x 10^3hours
Certifications	UL General Safety	Report: E248550	UL 60950-1 1st Ed. C22.2 No. 60950-1-03
	EN General Safety	Report: LVD-2K05230	EN60950-1:2001
	EN Medical Safety	Report: ETS-060065	EN60601-1:1988 + A1: 1991 + A2: 1995

Single



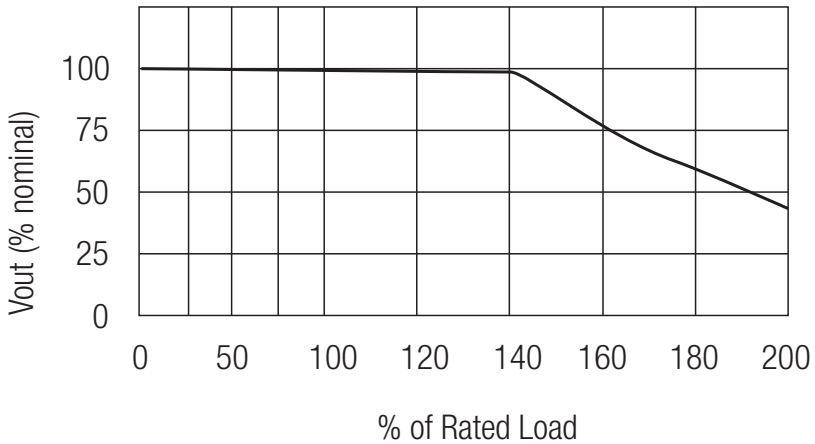
Dual



REC 7.5

Typical Characteristics

Overload Response

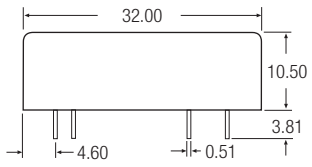


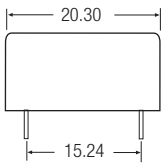
REC7.5-S_DRW/H*/A/M Series

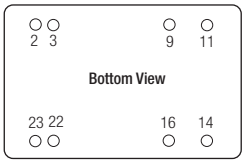
Package Style and Pinning (mm) Wide Input 2:1

3rd angle projection

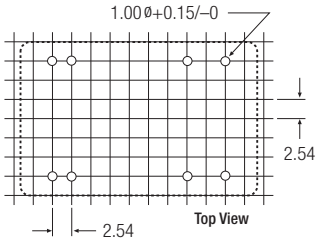
24 PIN DIP Package







Recommended Footprint Details



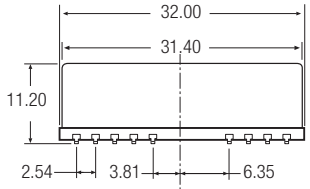
Pin Connections DIP24

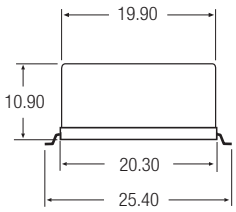
Pin #	Single	Dual
1(Option)	CTRL	CTRL
2	–Vin	–Vin
3	–Vin	–Vin
9	NC	Com
11	NC	–Vout
14	+Vout	+Vout
16	– Vout	Com
22	+Vin	+Vin
23	+Vin	+Vin

XX.X ± 0.5 mm
XX.XX ± 0.25 mm

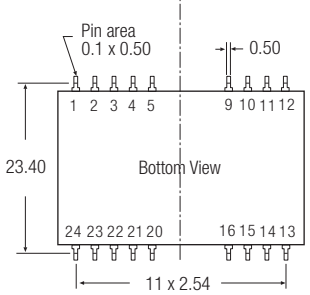
24 PIN SMD Package

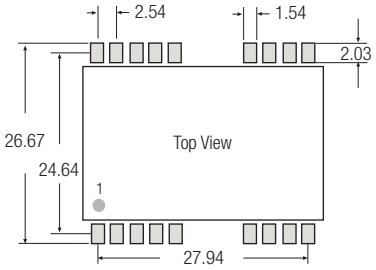
/H3/A/M/SMD combination is not allowed





Recommended Footprint Details





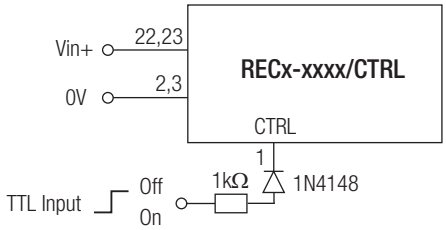
Pin Connections DIP24 SMD

Pin #	Single	Dual
1(Option)	CTRL	CTRL
2	–Vin	–Vin
3	–Vin	–Vin
9	NC	Com
11	NC	–Vout
14	+Vout	+Vout
16	– Vout	Com
22	+Vin	+Vin
23	+Vin	+Vin
1,4,5,10,12		NC
13,15,20,21,24		NC

NC = No Connection
XX.X ± 0.5 mm
XX.XX ± 0.25 mm

CTRL Option

ON = Open or 0V< V_{ctrl} <1.2V
OFF = 2.2V< V_{ctrl} <12V



REC 7.5

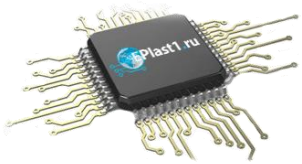
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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