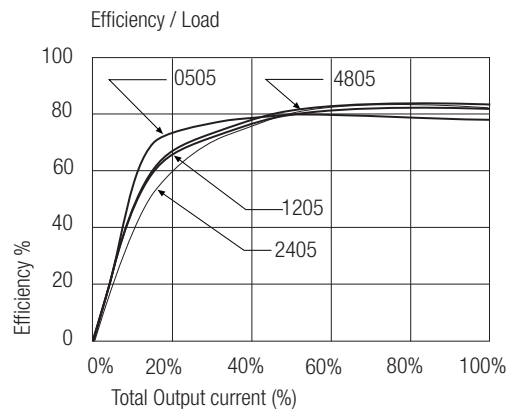


Specifications (measured at $T_A = 25^\circ\text{C}$, nominal input voltage, full load and after warm-up)

Input Voltage Range			2:1
Output Voltage Accuracy			±2% max.
Line Regulation	(HL-LL)		±0.3% max.
Load Regulation	(for output load current change from 20% to 100%)		±0.6% max.
Input Surge	(1 minute)	5V types	16V max.
		12V types	25V max.
		24V types	50V max.
		48V types	100V max.
Undervoltage Lockout	(/X1 Versions)	5V types	3.5V typ. (±20%)
		12V types	7V typ. (±20%)
		24V types	15V typ. (±10%)
		48V types	32V typ. (±10%)
Output Ripple and Noise	(0,1µF capacitor on output, 20MHz BW limited)		150mVp-p max.
Transient Response	(25% step change)		1ms typ.
Switching Frequency	(Full load and nominal input voltage)		150kHz min. / 500kHz max.
Input Filter			Pi Network
Capacitors	All types		MLCC capacitors only
Minimum Load	(Operation under no load will not damage the converter, but it may not meet all specifications)		20% Full Load
No Load Power Consumption			400mW max.
Isolation Voltage	R8-Suffix	(tested for 1 second)	8000VDC
		(rated for 1 minute**)	4000VAC / 60Hz
Isolation Voltage	R10-Suffix	(tested for 1 second)	10000VDC.
		(rated for 1 minute**)	5000VAC / 60Hz
Isolation Capacitance			20pF typ.
Isolation Resistance			10 GΩ min.
Short Circuit Protection		(Max operating temp. = 60°C during short circuit conditions)	Continuous, Auto Restart
Operating Temperature Range		(free air convection)	-40°C to +85°C (see Graph)
Case Temperature			105°C max.
Storage Temperature Range			-55°C to +125°C
Relative Humidity			95% RH
Case Material			Non-Conductive Plastic
Potting Material			Silicone
Thermal Impedance			Natural convection 20°C/W
Package Weight			14g
Packing Quantity			15 pcs per Tube
MTBF (+25°C) (+75°C)	} Detailed Information see Application Notes chapter "MTBF"	using MIL-HDBK 217F	1206 x 10 ³ hours
		using MIL-HDBK 217F	392x 10 ³ hours
EMC (with 470µF//0.1µF capacitors across input)	Conducted Emissions	EN55022	Class A
	Radiated Emissions	EN55022	Class A
Reinforced Isolation	Transformer Creepage	/R8 and /R10 Types	4.6 mm min.
	Transformer Clearance	/R8 and /R10 Types	2.4 mm min.
	PCB Creepage & Clearance	/R8 and /R10 Types	6.0 mm min.
	Optocoupler Creepage	/R8 and /R10 Types	6.0 mm min.
External Creepage and Clearance	Plastic Case	Input <> Output pins	14.2 mm min.
Certifications	EN Medical Safety		Report: MDD1207051 + RM1207051 Medical Report + ISO14971 Risk Assessment EN 60601-1 3rd Edition
	IEC Medical Safety		CB Report: CA-10168-A1-UL IEC 60601-1 3rd Edition
	CSA	Medical Safety	Report: 2202478 C22.2 601-1 2nd Ed.
	UL	Medical Safety	E314885-A4 UL 60601-1 3rd Edition
		General Safety	Report: 2219431 C22.2 No. 60950-1-03
	UL 60950-1 1st Ed.		Recoognised as Reinforced Isolation Supplement to Report: 2219431

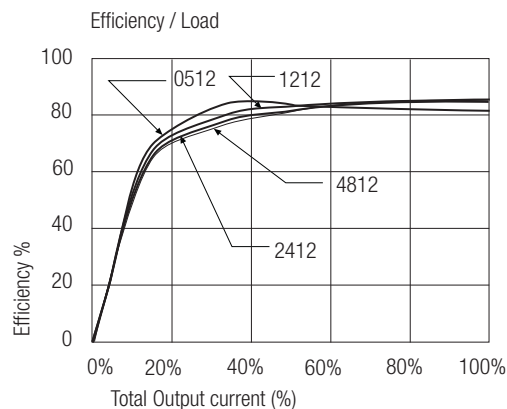
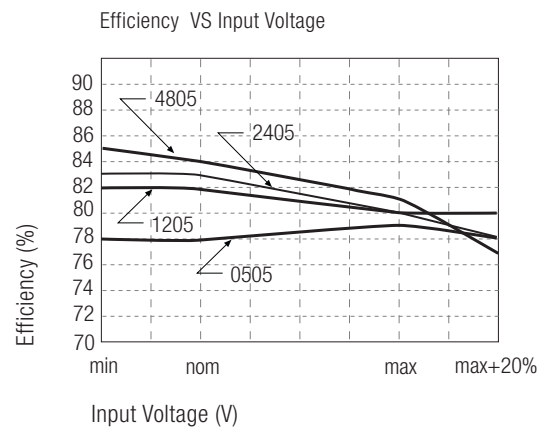
**Any data referred to in this datasheet are of indicative nature and based on our practical experience only. For further details, please refer to our Application Notes.

Efficiency vs Load

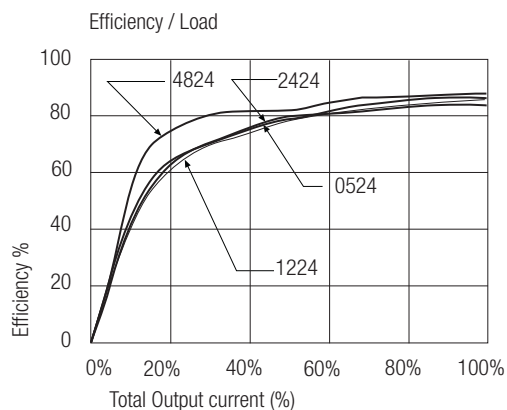
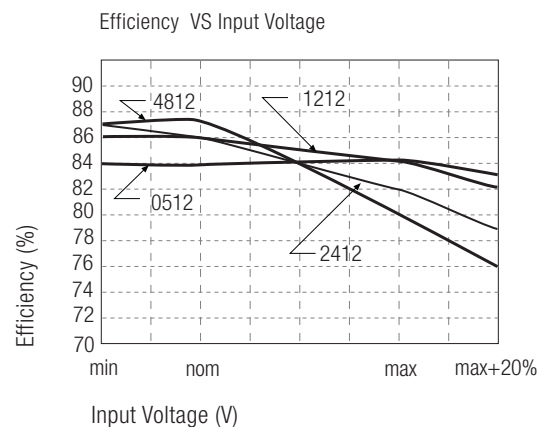


REC3.5-xx05SRW/R*
REC3.5-xx05DRW/R*

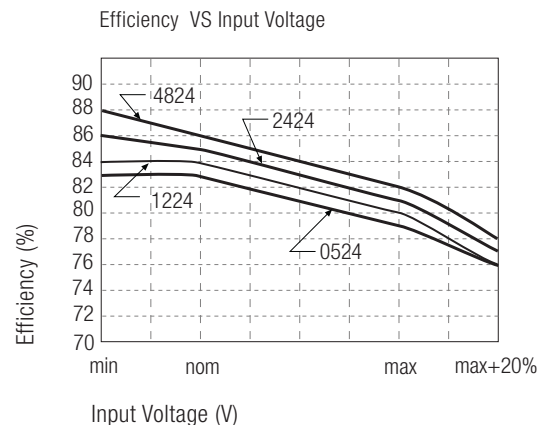
Efficiency vs Vin



REC3.5-xx12SRW/R*

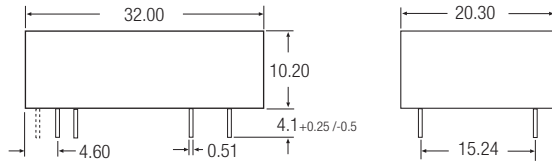


REC3.5-xx24SRW/R*
REC3.5-xx12DRW/R*

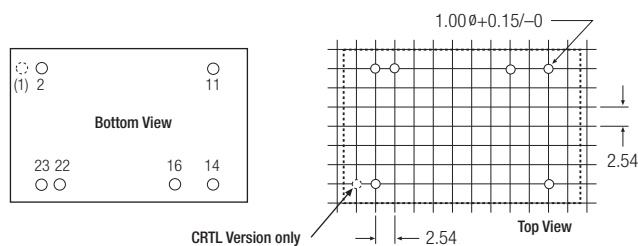


"A" Pinning

/R8 & /R10



Recommended Footprint Details



Pin Connections

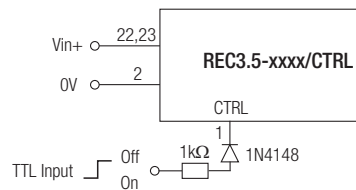
Pin #	Single	Dual
1 (option)	CTRL	CTRL
2	–Vin	–Vin
11	NC	–Vout
14	+Vout	+Vout
16	–Vout	Com
22	+Vin	+Vin
23	+Vin	+Vin

NC = No Connection

XX.X $\pm$ 0.5 mm
XX.XX $\pm$ 0.25 mm

CTRL Option

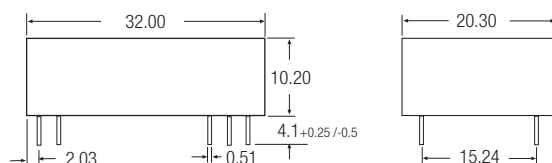
ON = Open or $0V < V_{ctrl} < 1.2V$
OFF = $2.2V < V_{ctrl} < 12V$



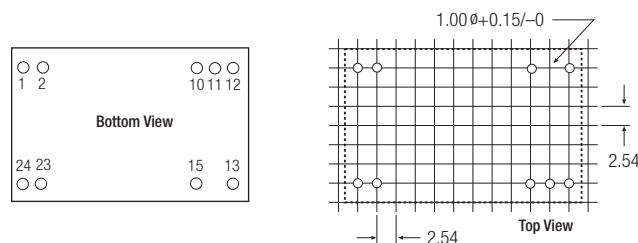
REC3.5/R

"C" Pinning

/R8 & /R10



Recommended Footprint Details



Pin Connections

Pin #	Single	Dual
1	+Vin	+Vin
2	+Vin	+Vin
10	NC	Com
11	NC	Com
12	−Vout	NC
13	+Vout	−Vout
15	NC	+Vout
23	−Vin	−Vin
24	−Vin	−Vin

NC = No Connection

XX.X ± 0.5 mm
XX.XX ± 0.25 mm