

Specifications - Continued

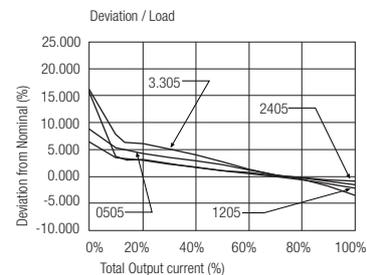
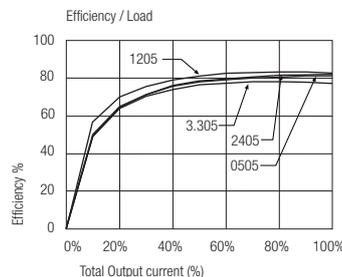
Isolation Voltage	(tested for 1 second) (rated for 1 minute****)	1000VDC 500VAC / 60Hz
Isolation Voltage	(tested for 1 second) (rated for 1 minute****)	3000VDC 1500VAC / 60Hz
Isolation Capacitance		115pF max.
Isolation Resistance	(Viso 500V)	10 GΩ min.
Short Circuit Protection		1 Second
P-Suffix		Continuous
Operating Temperature Range (free air convection)		-40°C to +100°C (see Graph)
Storage Temperature Range		-55°C to +125°C
Reflow Temperature	ROHS compliant	245°C (30 sec), peak 255°C (5 sec) max.
Vapor Phase Process	(for more details see Application Notes)	230°C (90 sec) max.
Relative Humidity		95% RH
Package Weight	R2S, R2S8 R2D, R2D10 R2S12, R2D12	1.4g 1.5g 1.6g
Packing Quantity	R2S, R2S8 R2S12, R2D, R2D10, R2D12 All Types	39 pcs per Tube 33 pcs per tube 250 pcs per Reel
MTBF (+25°C) (+85°C)	} Detailed Information see Application Notes chapter "MTBF" using MIL-HDBK 217F	886 x 10 ³ hours 128 x 10 ³ hours
Certifications		
CB Test Report	Report: US/14402/UL	
UL General Safety	Report: E358085	UL 60950-1 2nd Ed.
CUL General Safety		C22.2 No. 60950-1-03
EN Medical Safety	Report: MDD1205098-2 + RM1205098-2 Medical Report + ISO14971 Risk Assessment	IEC/EN 60601-1 3rd Ed.
EN General Safety	Report: SPCLVD 1211033-3	EN60950-1: 2006 + A12:2011
Conducted / Radiated Emissions	EN55022	Level A

Notes

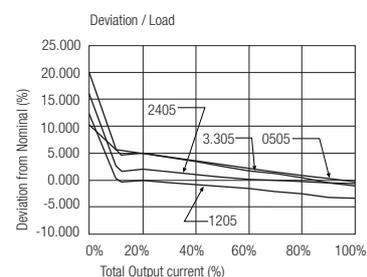
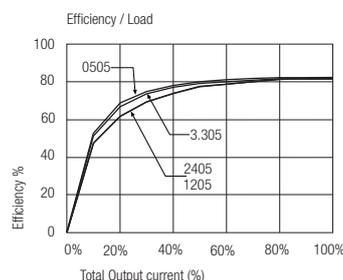
Note 1 Maximum capacitive load is defined as the capacitive load that will allow start up in under 1 second without damage to the converter.

Typical Characteristics

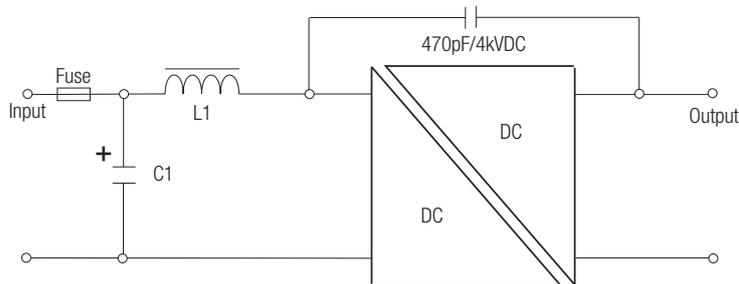
R2S-xx05



R2D-xx05

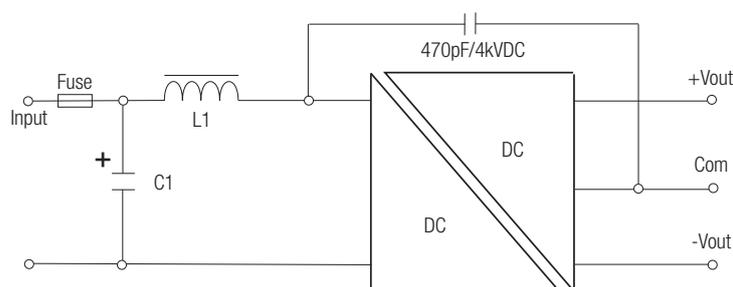


EMC Filtering - Suggestion for EN55022 Class B (Conducted and Emitted)



Standard and /H versions

C1	L1	Vin
2.2µF	4.7µH	5V
2.2µF	10µH	12V
2.2µF	22µH	15V
4.7µF	22µH	24V



/P and /HP versions

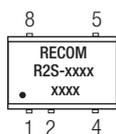
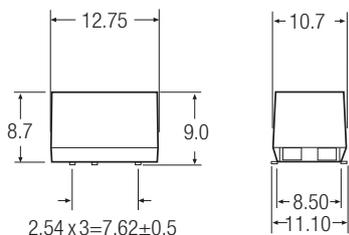
C1	L1	Vin
10µF	10µH	5V
4.7µF	22µH	12V
4.7µF	22µH	15V
10µF	47µH	24V

C1 = MLCC

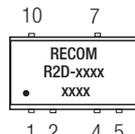
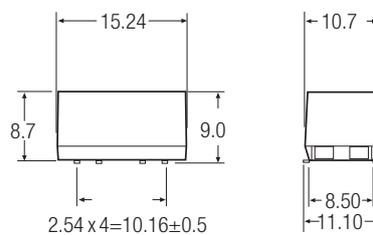
L1 = SMD Inductor

Package Style and Pinning (mm)

8 PIN Single SMD Package



10 PIN Dual SMD Package

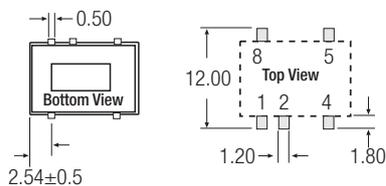


Pin Connections

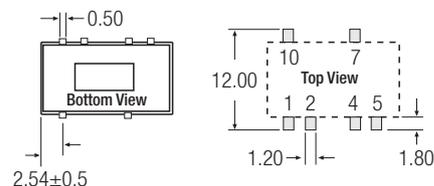
Pin #	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
4	-Vout	Com
5	+Vout	-Vout
7	No Pin	+Vout
8	NC	No Pin
10	No Pin	NC

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

Recommended Footprint Details



Recommended Footprint Details



R2S** : ** without marking denotes 5 pins out of 8 fitted (includes /H option)
 ** with marking **8** denotes 8 pins out of 8 fitted (/H option not available)

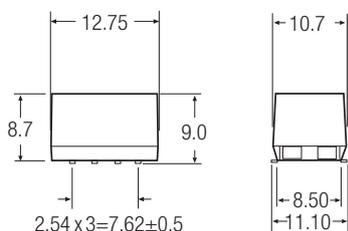
R2D** : ** without marking denotes 6 pins out of 10 fitted (includes /H option)
 ** with marking **10** denotes with 10 pins out of 10 fitted (/H option not available)

e.g. R2S-0505, R2S-0505/H, R2S-0505/HP
 e.g. R2S8-0505, R2S8-0505/P

e.g. R2D-0505, R2D-0505/H, R2D-0505/HP
 e.g. R2D10-0505, R2D10-0505/P

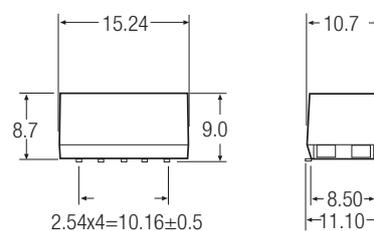
Package Style and Pinning (mm)

Full 8 PIN Single SMD Package

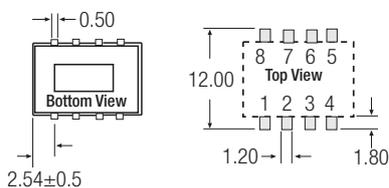


Note: /H option is not available in these pin packages

Full 10 PIN Dual SMD Package



Recommended Footprint Details



Pin Connections

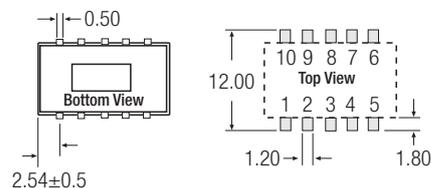
Pin #	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	NC	NC
4	-Vout	Com
5	+Vout	-Vout
6	NC	NC
7	NC	+Vout
8	NC	NC
9	-	NC
10	-	NC

NC = No Connection

XX.X ± 0.5 mm

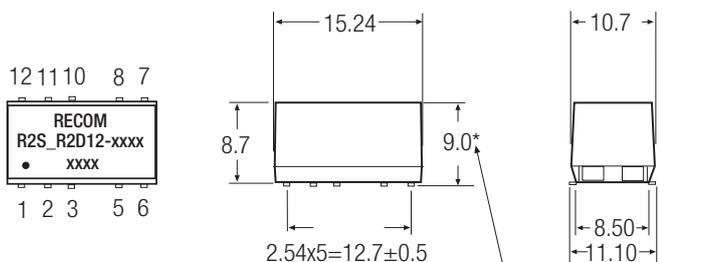
XX.XX ± 0.25 mm

Recommended Footprint Details



12 PIN Single and Dual SMD Package

Note: /H option is available in this pin package



Pin Connections

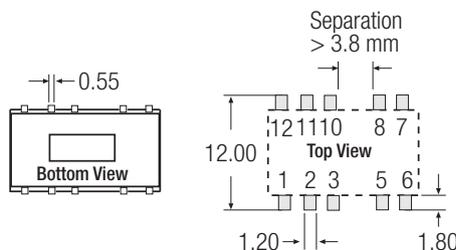
Pin #	Single	Dual
1	-Vin	-Vin
2	+Vin	+Vin
3	NC	NC
5	-Vout	Com
6	NC	-Vout
7	NC	NC
8	+Vout	+Vout
10	NC	NC
11	NC	NC
12	NC	NC

NC = No Connection

XX.X ± 0.5 mm

XX.XX ± 0.25 mm

Recommended Footprint Details



R2S** : ** with marking 12 denotes 10 pins out of 12 fitted (includes /H option)

R2D** : ** with marking 12 denotes 10 pins out of 12 fitted (includes /H option)

e.g. R2S12-0505, R2S12-0505/H, R2S12-0505/HP

e.g. R2D12-0505, R2D12-0505/H, R2D12-0505/HP

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

RECOM:

[R2S-0505](#) [R2S-1205](#) [R2S-1212](#) [R2D-0505](#) [R2D-0505/H](#) [R2D-0505/HP](#) [R2D-0505/HP-R](#) [R2D-0505/H-R](#) [R2D-0505/P](#) [R2D-0505/P-R](#) [R2D-0505-R](#) [R2D-0509](#) [R2D-0509/H](#) [R2D-0509/HP](#) [R2D-0509/HP-R](#) [R2D-0509/H-R](#) [R2D-0509/P](#) [R2D-0509/P-R](#) [R2D-0509-R](#) [R2D-0512](#) [R2D-0512/H](#) [R2D-0512/HP](#) [R2D-0512/HP-R](#) [R2D-0512/H-R](#) [R2D-0512/P](#) [R2D-0512/P-R](#) [R2D-0512-R](#) [R2D-0515](#) [R2D-0515/H](#) [R2D-0515/HP](#) [R2D-0515/HP-R](#) [R2D-0515/H-R](#) [R2D-0515/P](#) [R2D-0515/P-R](#) [R2D-0515-R](#) [R2D-0524](#) [R2D-0524/H](#) [R2D-0524/HP](#) [R2D-0524/HP-R](#) [R2D-0524/H-R](#) [R2D-0524/P](#) [R2D-0524/P-R](#) [R2D-0524-R](#) [R2D10-0505](#) [R2D10-0505/P](#) [R2D10-0505/P-R](#) [R2D10-0505-R](#) [R2D10-0509](#) [R2D10-0509/P](#) [R2D10-0509/P-R](#) [R2D10-0509-R](#) [R2D10-0512](#) [R2D10-0512/P](#) [R2D10-0512/P-R](#) [R2D10-0512-R](#) [R2D10-0515](#) [R2D10-0515/P](#) [R2D10-0515/P-R](#) [R2D10-0515-R](#) [R2D10-0524](#) [R2D10-0524/P](#) [R2D10-0524/P-R](#) [R2D10-0524-R](#) [R2D10-1205](#) [R2D10-1205/P](#) [R2D10-1205/P-R](#) [R2D10-1205-R](#) [R2D10-1209](#) [R2D10-1209/P](#) [R2D10-1209/P-R](#) [R2D10-1209-R](#) [R2D10-1212](#) [R2D10-1212/P](#) [R2D10-1212/P-R](#) [R2D10-1212-R](#) [R2D10-1215](#) [R2D10-1215/P](#) [R2D10-1215/P-R](#) [R2D10-1215-R](#) [R2D10-1224](#) [R2D10-1224/P](#) [R2D10-1224/P-R](#) [R2D10-1224-R](#) [R2D10-1505](#) [R2D10-1505/P](#) [R2D10-1505/P-R](#) [R2D10-1505-R](#) [R2D10-1509](#) [R2D10-1509/P](#) [R2D10-1509/P-R](#) [R2D10-1509-R](#) [R2D10-1512](#) [R2D10-1512/P](#) [R2D10-1512/P-R](#) [R2D10-1512-R](#) [R2D10-1515](#) [R2D10-1515/P](#) [R2D10-1515/P-R](#) [R2D10-1515-R](#) [R2D10-1524](#)