

DC/DC Converters – SRD-S/D1 series

1.5 WATT (available also 2W series)
Single / Dual Output

FEATURES

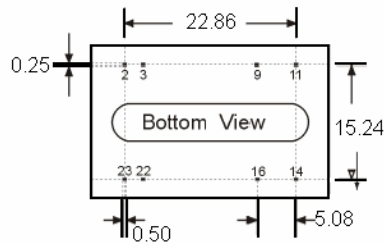
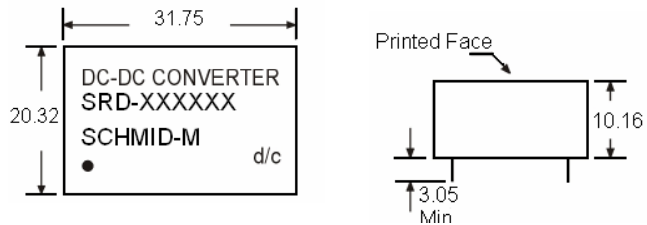
- Wide 2:1 Input Range
- Full SMD Technology
- 1500 VDC Isolation, Up to 3500 VDC
- Continuous Short Circuit Protection
- Plastic Case Standard, Optional Metal Case

Input specifications:	
Filter:	Capacitors
Voltage Range	12Vdc, 9-18Vdc, 24Vdc, 18-36Vdc, 48Vdc, 36-72Vdc
Isolation specification:	
Rated Voltage	1500 Vdc, Standard
Resistance	1000M Ω Min.
Capacitance	60 pF, Typ.
Output specifications:	
Voltage accuracy	$\pm 1\%$, Max
Ripple & noise (at 20MHz BW)	60 mVp-p, Max
Short Circuit Protection	Continuous
Line regulation	$\pm 0.5\%$ Max.
Load regulation	$\pm 0.5\%$ Max.
Temperature coefficient	$\pm 0.02\%/^{\circ}\text{C}$
General Specifications:	
Efficiency	Up to 78%
Switching Frequency	100 ~ 400 kHz, Typ.
Environmental specifications:	
Operating Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Case temperature	100°C Max.
Storage Temperature	$-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Cooling	Nature Convection

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
SRD-0505S1	4.5-9	5	300	65
SRD0509S1		9	167	67
SRD-0512S1		12	125	70
SRD-0515S1		15	100	67
SRD-0524S1		24	62,5	66
SRD-0505D1	4.5-9	± 5	± 150	65
SRD-0509D1		± 9	$\pm 83,3$	67
SRD-0512D1		± 12	$\pm 62,5$	70
SRD-0515D1		± 15	± 50	67
SRD-0524D1		± 24	± 31	66
SRD-1205S1	9-18	5	300	74
SRD-1209S1		9	167	77
SRD-1212S1		12	125	76
SRD-1215S1		15	100	78
SRD-1224S1		24	62,5	78
SRD-1205D1	9-18	± 5	± 150	74
SRD-1209D1		± 9	$\pm 83,3$	76
SRD-1212D1		± 12	$\pm 62,5$	75
SRD-1215D1		± 15	± 50	78
SRD-1224D1		± 24	± 31	78
SRD-2405S1	18-36	5	300	74
SRD-2409S1		9	167	74
SRD-2412S1		12	125	76
SRD-2415S1		15	100	76
SRD-2424S1		24	62,5	77
SRD-2405D1	18-36	± 5	± 150	75
SRD-2409D1		± 9	$\pm 83,3$	76
SRD-2412D1		± 12	$\pm 62,5$	77
SRD-2415D1		± 15	± 50	78
SRD-2424D1		± 24	± 31	78
SRD-4805S1	36-72	5	300	73
SRD-4809S1		9	167	75
SRD-4812S1		12	125	77
SRD-4815S1		15	100	77
SRD-4824S1		24	62,5	78
SRD-4805D1	36-72	± 5	± 150	74
SRD-4809D1		± 9	$\pm 83,3$	75
SRD-4812D1		± 12	$\pm 62,5$	77
SRD-4815D1		± 15	± 50	78
SRD-4824D1		± 24	± 31	78

MECHANICAL DIMENSIONS & PIN CONNECTIONS

PIN#	Single	Dual
2	-V Input	-V Input
3	-V Input	-V Input
9	N.P.	Common
11	N.C.	-V Output
14	+V Output	+V Output
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input



DC/DC Converters – SRD-S/D3 series

3 WATT
(available also 4, 5 and 6W series)
Single / Dual Output

FEATURES

- Wide 2:1 Input Range
- Full SMD Technology
- 1500 VDC Isolation, Up to 3500 VDC
- Continuous Short Circuit Protection
- Plastic Case Standard, Optional Metal Case

Input specifications:	
Filter:	Capacitors
Voltage Range	12Vdc, 9-18Vdc, 24Vdc, 18-36Vdc, 48Vdc, 36-72Vdc
Isolation specification:	
Rated Voltage	1500 Vdc, Standard
Resistance	1000M Ω Min.
Capacitance	60 pF, Typ.
Output specifications:	
Voltage accuracy	$\pm 1\%$, Max
Ripple & noise (at 20MHz BW)	60 mVp-p, Max
Short Circuit Protection	Continuous
Line regulation	$\pm 0.5\%$ Max.
Load regulation	$\pm 0.5\%$ Max.
Temperature coefficient	$\pm 0.02\%/^{\circ}\text{C}$
General Specifications:	
Efficiency	Up to 82%
Switching Frequency	100 ~ 400 kHz, Typ.
Environmental specifications:	
Operating Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Case temperature	100 $^{\circ}\text{C}$ Max.
Storage Temperature	$-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Cooling	Nature Convection

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
SRD-0505S3	4.5-9	5	600	70
SRD-0509S3		9	333	72
SRD-0512S3		12	250	74
SRD-0515S3		15	200	74
SRD-0524S3		24	125	70
SRD-0505D3	4.5-9	± 5	± 300	69
SRD-0509D3		± 9	± 167	70
SRD-0512D3		± 12	± 125	72
SRD-0515D3		± 15	± 100	74
SRD-0524D3		± 24	± 63	70
SRD-1205S3	9-18	5	600	76
SRD-1209S3		9	333	77
SRD-1212S3		12	250	79
SRD-1215S3		15	200	79
SRD-1224S3		24	125	79
SRD-1205D3	9-18	± 5	± 300	77
SRD-1209D3		± 9	± 167	78
SRD-1212D3		± 12	± 125	78
SRD-1215D3		± 15	± 100	78
SRD-1224D3		± 24	± 63	78
SRD-2405S3	18-36	5	600	80
SRD-2409S3		9	333	80
SRD-2412S3		12	250	82
SRD-2415S3		15	200	82
SRD-2424S3		24	125	80
SRD-2405D3	18-36	± 5	± 300	78
SRD-2409D3		± 9	± 167	79
SRD-2412D3		± 12	± 125	80
SRD-2415D3		± 15	± 100	80
SRD-2424D3		± 24	± 63	80
SRD-4805S3	36-72	5	600	77
SRD-4809S3		9	333	78
SRD-4812S3		12	250	80
SRD-4815S3		15	200	80
SRD-4824S3		24	125	80
SRD-4805D3	36-72	± 5	± 300	78
SRD-4809D3		± 9	± 167	79
SRD-4812D3		± 12	± 125	80
SRD-4815D3		± 15	± 100	80
SRD-4824D3		± 24	± 63	80

MECHANICAL DIMENSIONS & PIN CONNECTIONS

PIN#	Single	Dual
2	-V Input	-V Input
3	-V Input	-V Input
9	N.P.	Common
11	N.C.	-V Output
14	+V Output	+V Output
16	-V Output	Common
22	+V Input	+V Input
23	+V Input	+V Input

