

# DC/DC Converters – SJ-S/D1 series

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

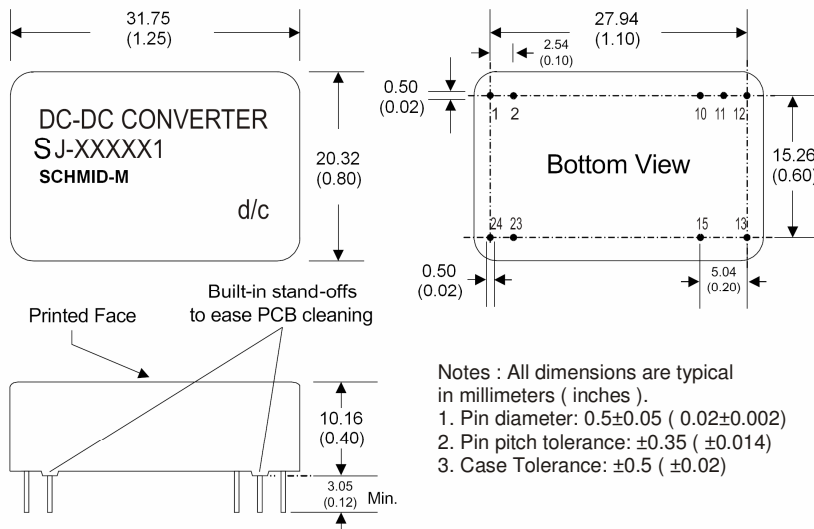
## FEATURES

- Wide 4:1 Input Range
- Full SMD Technology
- 1500 Vdc Isolation, Up to 3500 VDC
- Operating Temperature Range - 40°C ~ 85°C
- Continuous Short Circuit Protection
- Efficiency up to 80 %
- Metal Case Standard, Optional Plastic Case

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)	
SJ-243R3S1	9-36	3.3	454	73	<b>Input specifications:</b> Input Reflected Ripple Current Filter: 35mA pk-pk, typ Pi Type
SJ-2405S1		5	300	77	
SJ-2409S1		9	167	78	
SJ-2412S1		12	125	81	
SJ-2415S1		15	100	80	
SJ-2424S1		24	63	80	
SJ-243R3D1		±3.3	±227	73	
SJ-2405D1		±5	±150	77	
SJ-2409D1		±9	±84	80	
SJ-2412D1		±12	±63	80	
SJ-2415D1		±15	±50	79	
SJ-2424D1		±24	±32	80	
SJ-483R3S1	18-72	3.3	454	75	<b>Output specifications:</b> Voltage accuracy ±1% Ripple & noise (at 20MHz BW) 60mV pk-pk Short Circuit Protection Indefinite Line regulation ±0.5% Load regulation ±0.5% (±)3.3V models ±1.5% Temperature coefficient ±0.02%/°C
SJ-4805S1		5	300	80	
SJ-4809S1		9	167	82	
SJ-4812S1		12	125	80	
SJ-4815S1		15	100	82	
SJ-4824S1		24	63	82	
SJ-483R3D1		±3.3	±227	75	
SJ-4805D1		±5	±150	78	
SJ-4809D1		±9	±84	83	
SJ-4812D1		±12	±63	80	
SJ-4815D1		±15	±50	80	
SJ-4824D1		±24	±32	80	
Suffix „P“ means Plastic Case, „H“ means 3500Vdc Isolation					<b>General Specifications:</b> Efficiency 73% ~ 82% Switching Frequency 266 kHz, typ I/O isolation voltage (3 sec) 1500~3500Vdc Metal Case 1000Vdc Safety standard IEC 60950-1:2001
					<b>Environmental specifications:</b> Operating Temperature -40°C ~ +85°C Case temperature 100°C Max. Storage Temperature -40°C ~ +125°C Cooling Nature Convection Humidity 95% rel H

## MECHANICAL DIMENSIONS & PIN CONNECTIONS

### 24 Pin DIL Package



PIN #	Single	Dual
1	+Vin	+Vin
2	+Vin	+Vin
10	N.C.	Common
11	N.C.	Common
12	-Vout	N.C.
13	+Vout	-Vout
15	N.C.	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

- Notes : All dimensions are typical in millimeters ( inches ).
1. Pin diameter: 0.5±0.05 ( 0.02±0.002)
  2. Pin pitch tolerance: ±0.35 ( ±0.014)
  3. Case Tolerance: ±0.5 ( ±0.02)

# DC/DC Converters – SJ-S/D3 series

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

## FEATURES

- Wide 4:1 Input Range
- Full SMD Technology
- 1500 Vdc Isolation, Up to 3500 VDC
- Operating Temperature Range - 40°C ~ 85°C
- Continuous Short Circuit Protection
- Efficiency up to 80 %
- Metal Case Standard, Optional Plastic Case

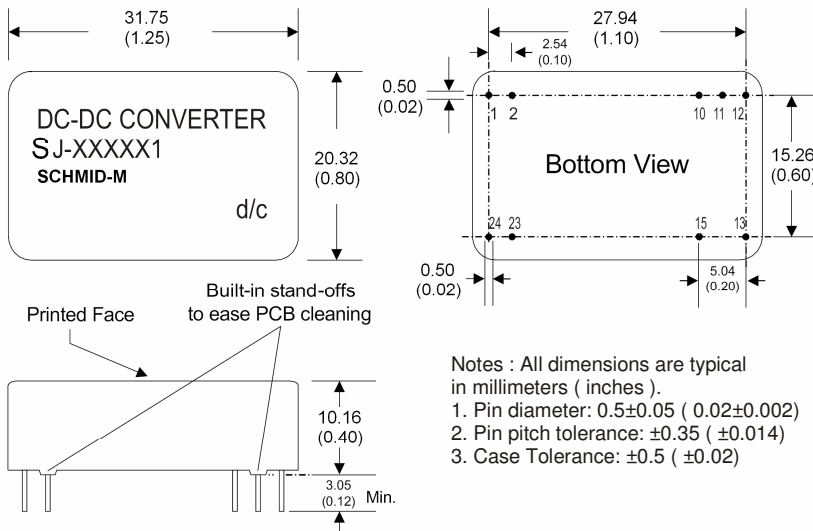
Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)	
SJ-243R3S3	9-36	3.3	900	75	
SJ-2405S3		5	600	78	
SJ-2409S3		9	333	80	
SJ-2412S3		12	250	80	
SJ-2415S3		15	200	80	
SJ-2424S3		24	125	80	
SJ-243R3D3		±3.3	±454	75	
SJ-2405D3		±5	±300	78	
SJ-2409D3		±9	±166	80	
SJ-2412D3		±12	±125	80	
SJ-2415D3		±15	±100	80	
SJ-2424D3		±24	±63	80	
SJ-483R3S3		18-72	3.3	900	75
SJ-4805S3			5	600	78
SJ-4809S3	9		333	80	
SJ-4812S3	12		250	80	
SJ-4815S3	15		200	80	
SJ-4824S3	24		125	80	
SJ-483R3D3	±3.3		±454	75	
SJ-4805D3	±5		±300	78	
SJ-4809D3	±9		±166	80	
SJ-4812D3	±12		±125	80	
SJ-4815D3	±15		±100	80	
SJ-4824D3	±24		±63	80	

Suffix „P” means Plastic Case, „H” means 3500Vdc Isolation

<b>Input specifications:</b>	
Input Reflected Ripple Current Filter:	35mA pk-pk, typ Pi Type
<b>Output specifications:</b>	
Voltage accuracy	±1%
Ripple & noise (at 20MHz BW)	60mV pk-pk
Short Circuit Protection	Indefinite
Line regulation	±0.5%
Load regulation	±0.5%
Temperature coefficient	(±)3.3V models ±1.5% ±0.02%/°C
<b>General Specifications:</b>	
Efficiency	75% ~ 80%
Switching Frequency	266 kHz, typ
I/O isolation voltage (3 sec)	1500~3500Vdc
Safety standard	Metal Case 1000Vdc IEC 60950-1:2001
<b>Environmental specifications:</b>	
Operating Temperature	-40°C ~ +85°C
Case temperature	100°C Max.
Storage Temperature	-40°C ~ +125°C
Cooling	Nature Convection
Humidity	95% rel H

## MECHANICAL DIMENSIONS & PIN CONNECTIONS

### 24 Pin DIL Package



PIN #	Single	Dual
1	+Vin	+Vin
2	+Vin	+Vin
10	N.C.	Common
11	N.C.	Common
12	-Vout	N.C.
13	+Vout	-Vout
15	N.C.	+Vout
23	-Vin	-Vin
24	-Vin	-Vin

Notes : All dimensions are typical in millimeters ( inches ).  
 1. Pin diameter: 0.5±0.05 ( 0.02±0.002)  
 2. Pin pitch tolerance: ±0.35 ( ±0.014)  
 3. Case Tolerance: ±0.5 ( ±0.02)