

## DC/DC Converter – RJ-S/D1

1.5 WATT  
Single / Dual Output

### FEATURES

- 1500 Vdc Isolation (3500 Vdc Isolation available)
- Wide 4:1 Input Range
- 24 Pin DIL Package
- Regulated
- Continuous Short Circuit Protection
- Non-Conductive Plastic Case

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
RJ-243R3S1	9-36	3.3	400	72
RJ-2405S1		5	300	74
RJ-2409S1		9	167	74
RJ-2412S1		12	125	74
RJ-2415S1		15	100	74
RJ-2418S1		18	84	74
RJ-2424S1		24	63	74
RJ-243R3D1	9-36	±3.3	±200	72
RJ-2405D1		±5	±150	74
RJ-2409D1		±9	±84	74
RJ-2412D1		±12	±63	74
RJ-2415D1		±15	±50	74
RJ-2418D1		±18	±42	74
RJ-2424D1		±24	±32	74
RJ-483R3S1	18-72	3.3	400	72
RJ-4805S1		5	300	73
RJ-4809S1		9	167	73
RJ-4812S1		12	125	73
RJ-4815S1		15	100	73
RJ-4818S1		18	84	74
RJ-4824S1		24	63	74
RJ-483R3D1	18-72	±3.3	±200	72
RJ-4805D1		±5	±150	73
RJ-4809D1		±9	±84	73
RJ-4812D1		±12	±63	73
RJ-4815D1		±15	±50	73
RJ-4818D1		±18	±42	73
RJ-4824D1		±24	±32	73

1. Suffix " M " Metal Instead of Plastic case Package.  
2. Input Voltage range is from 9 V to 72 V and Output Voltage is from 3.3 V to 24 V.

#### Input Specifications:

Voltage Range 24Vdc, 09-36 Vdc  
48Vdc, 36-72 Vdc  
Filter  $\pi$  (Pi) Network

#### Isolation Specification:

Rated Voltage 1500 Vdc, Standard  
Resistance 1000M  $\Omega$  Min.  
Capacitance 390 pF, Typ.

#### Output Specifications:

Voltage Accuracy:  $\pm 1\%$ , Max.  
Voltage Balance (Dual Outputs)  $\pm 1\%$   
Ripple and Noise (at 20 MHz BW) ( $\pm$ ) 60mRJ-p, Max  
Short Circuit Protection Continuous  
Short Circuit Restart Automatic  
Line Voltage Regulation  $\pm 0.5\%$ , Max.  
Load Voltage Regulation  $\pm 0.5\%$ , Max.  
Temperature Coefficient  $\pm 0.02\%$  / °C

#### General Specifications:

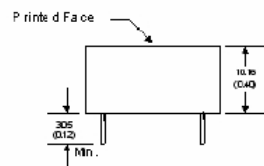
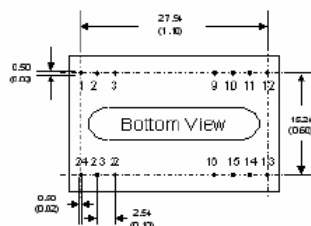
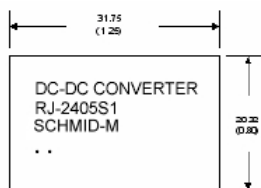
Efficiency 72% ~ 74%  
Switching Frequency 100K ~ 400 KHz, Typ.

#### Environmental Specification:

Operating Temperature (Ambient)  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$   
Case Temperature  $100^{\circ}\text{C}$  Max.  
Storage Temperature  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$   
Derating None Required  
Humidity Up to 90%, Non-condensing  
Cooling Free-air Convection

### MECHANICAL DIMENSIONS & PIN CONNECTIONS

#### 24 Pin DIL package



Pin #	STANDARD	
	Single	Dual
1	+V Input	+V Input
2	+V Input	+V Input
10	N.C	Common
11	N.C	Common
12	-V Output	N.C
13	+V Output	-V Output
15	N.C	+V Output
23	-V Input	-V Input
24	-V Input	-V Input

- Notes: 1. All dimensions are typical in millimeters (inches). Tolerance x.xx =  $\pm 0.25$  ( $\pm 0.01$ )  
2. Metal Case Dimensions are 31.75 \* 20.32 \* 10.16 mm.