

DC/DC Converter – VJ-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
- Nickel-Coated Copper Metal
- MTBF > 1.05MHours

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
VJ-243R3S1	9-36	3.3	400	72
VJ-2405S1		5	300	76
VJ-2409S1		9	167	76
VJ-2412S1		12	125	77
VJ-2415S1		15	100	77
VJ-2418S1		18	84	76
VJ-2424S1		24	63	76
VJ-243R3D1	9-36	±3.3	±200	72
VJ-2405D1		±5	±150	74
VJ-2409D1		±9	±84	77
VJ-2412D1		±12	±63	76
VJ-2415D1		±15	±50	78
VJ-2418D1		±18	±42	77
VJ-2424D1		±24	±32	76
VJ-483R3S1	18-72	3.3	400	72
VJ-4805S1		5	300	74
VJ-4809S1		9	167	75
VJ-4812S1		12	125	75
VJ-4815S1		15	100	75
VJ-4818S1		18	84	75
VJ-4824S1		24	63	76
VJ-483R3D1	18-72	±3.3	±200	73
VJ-4805D1		±5	±150	75
VJ-4809D1		±9	±84	75
VJ-4812D1		±12	±63	75
VJ-4815D1		±15	±50	76
VJ-4818D1		±18	±42	76
VJ-4824D1		±24	±32	76

1. Suffix " P " Plastic Instead of Metal 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 π (Pi) Network

Isolation Specification:

Rated Voltage 1500 Vdc, Standard
Resistance 1000M Ω 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) 60mVJ-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 $\pm 0.02\% / ^\circ\text{C}$

General Specifications:

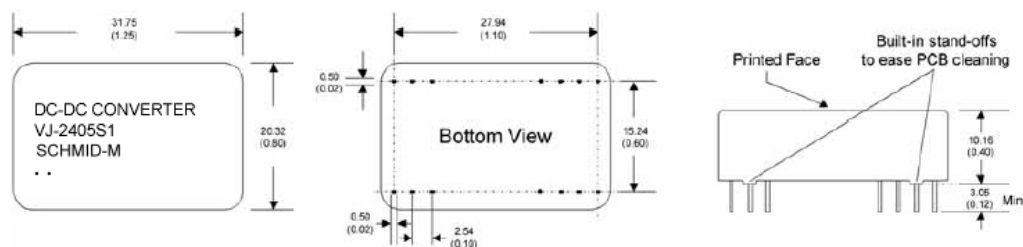
Efficiency 72% ~ 78%
Switching Frequency 260 KHz, Typ.

Environmental Specification:

Operating Temperature (Ambient) $-40^\circ\text{C} \sim +85^\circ\text{C}$
Case Temperature 100°C Max.
Storage Temperature $-40^\circ\text{C} \sim +125^\circ\text{C}$
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 = ± 0.25 (± 0.01)
2. Plastic Case Dimensions are 31.75 * 20.32 * 10.16 mm.

DC/DC Converter – VJ-S/D3

3 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
- Nickel-Coated Copper Metal
- MTBF > 1.05MHours

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
VJ-243R3S3	9-36	3.3	900	75
VJ-2405S3		5	600	78
VJ-2409S3		9	334	79
VJ-2412S3		12	250	81
VJ-2415S3		15	200	81
VJ-2418S3		18	167	81
VJ-2424S3		24	125	81
VJ-243R3D3	9-36	±3.3	±450	76
VJ-2405D3		±5	±300	79
VJ-2409D3		±9	±167	79
VJ-2412D3		±12	±125	80
VJ-2415D3		±15	±100	80
VJ-2418D3		±18	±84	81
VJ-2424D3		±24	±63	80
VJ-483R3S3	18-72	3.3	900	76
VJ-4805S3		5	600	80
VJ-4809S3		9	334	82
VJ-4812S3		12	250	80
VJ-4815S3		15	200	80
VJ-4818S3		18	167	80
VJ-4824S3		24	125	81
VJ-483R3D3	18-72	±3.3	±450	76
VJ-4805D3		±5	±300	81
VJ-4809D3		±9	±167	82
VJ-4812D3		±12	±125	81
VJ-4815D3		±15	±100	82
VJ-4818D3		±18	±84	81
VJ-4824D3		±24	±63	81

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Short Circuit Restart Automatic
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Load Voltage Regulation $\pm 0.5\%$, Max.
Temperature Coefficient $\pm 0.02\%$ / $^{\circ}\text{C}$

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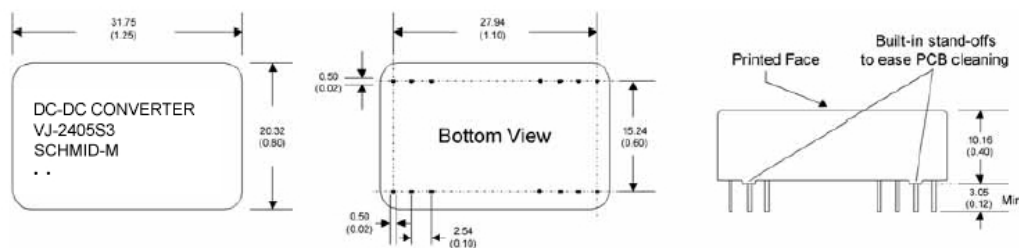
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Switching Frequency 260 KHz, Typ.

Environmental Specification:

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Case Temperature 100°C Max.
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Humidity Up to 90%, Non-condensing
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