

DC/DC Converter – VP-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 > 1.03MHours

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
VP-243R3S1	9-36	3.3	400	72
VP-2405S1		5	300	76
VP-2409S1		9	167	76
VP-2412S1		12	125	77
VP-2415S1		15	100	77
VP-2418S1		18	84	76
VP-2424S1	24	63	76	
VP-243R3D1	9-36	±3.3	±200	72
VP-2405D1		±5	±150	75
VP-2409D1		±9	±84	77
VP-2412D1		±12	±63	76
VP-2415D1		±15	±50	79
VP-2418D1		±18	±42	77
VP-2424D1	±24	±32	76	
VP-483R3S1	18-72	3.3	400	72
VP-4805S1		5	300	74
VP-4809S1		9	167	75
VP-4812S1		12	125	75
VP-4815S1		15	100	75
VP-4818S1		18	84	75
VP-4824S1	24	63	76	
VP-483R3D1	18-72	±3.3	±200	73
VP-4805D1		±5	±150	75
VP-4809D1		±9	±84	75
VP-4812D1		±12	±63	75
VP-4815D1		±15	±50	76
VP-4818D1		±18	±42	75
VP-4824D1	±24	±32	75	

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) 60mVp-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:

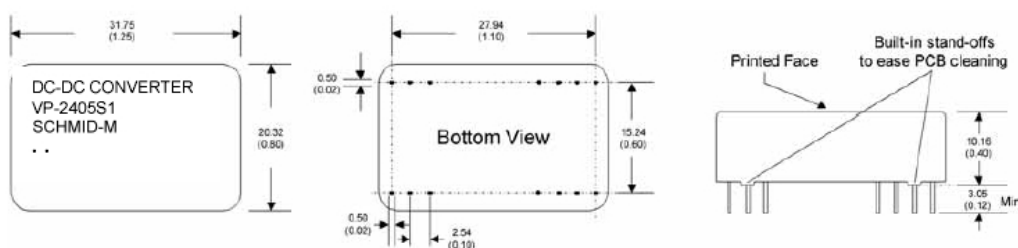
Efficiency 72% ~ 78%
Switching Frequency 260 KHz, Typ.

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	N.C	-V Output
3	N.C	Common
9	Omitted	Omitted
10	-V Output	Common
11	+V Output	+V Output
12	-V Input	-V Input
13	-V Input	-V Input
14	+V Output	+V Output
15	-V Output	Common
16	Omitted	Omitted
22	N.C	Common
23	N.C	-V Output
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.