

DC/DC Converter – VG-S/D1

1.5 WATT
Single / Dual Output

FEATURES

- 1500 Vdc Isolation (3500 Vdc Isolation available)
- Wide 2:1 Input Range
- 24 Pin DIL Package
- Regulated
- Continuous Short Circuit Protection
- Nickel-Coated Copper Metal
- MTBF > 1.12 MHours

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
VG-1205S1	9-18	5	300	74
VG-1209S1		9	167	77
VG-1212S1		12	125	76
VG-1215S1		15	100	78
VG-1224S1		24	63	78
VG-1205D1	9-18	±5	±150	74
VG-1209D1		±9	±84	76
VG-1212D1		±12	±63	75
VG-1215D1		±15	±50	78
VG-1224D1		±24	±32	78
VG-2405S1	18-36	5	300	74
VG-2409S1		9	167	74
VG-2412S1		12	125	76
VG-2415S1		15	100	76
VG-2424S1		24	63	77
VG-2405D1	18-36	±5	±150	75
VG-2409D1		±9	±84	76
VG-2412D1		±12	±63	77
VG-2415D1		±15	±50	78
VG-2424D1		±24	±32	78
VG-4805S1	36-72	5	300	73
VG-4809S1		9	167	75
VG-4812S1		12	125	77
VG-4815S1		15	100	77
VG-4824S1		24	63	78
VG-4805D1	36-72	±5	±150	74
VG-4809D1		±9	±84	75
VG-4812D1		±12	±63	77
VG-4815D1		±15	±50	78
VG-4824D1		±24	±32	78

1. Suffix " P " Plastic Instead of Metal case Package.
2. Input Voltage range is from 4.5 V to 72 V and Output Voltage is from 3.3 V to 24 V.

Input Specifications:

Voltage Range 12Vdc, 9-18 Vdc., 24Vdc, 18-36 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:

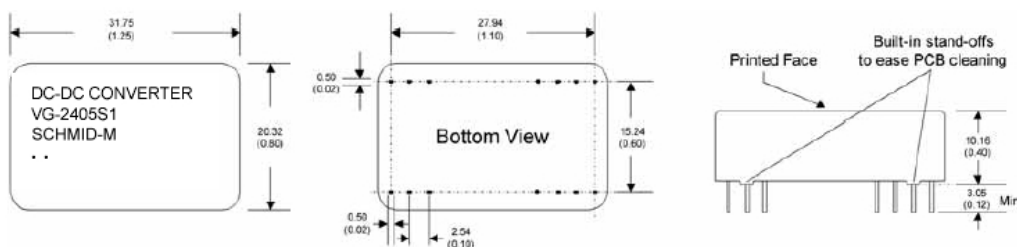
Efficiency 73% ~ 78%
Switching Frequency 60 KHz, Typ.

Environmental Specification:

Operating Temperature (Ambient) -40°C ~ $+85^{\circ}\text{C}$
Case Temperature 100°C Max.
Storage Temperature -40°C ~ $+125^{\circ}\text{C}$
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.