

DC/DC Converter – VQ-S/D4

4 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 > 0.96MHours

Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
VQ-243R3S4	9-36	3.3	1200	77
VQ-2405S4		5	800	80
VQ-2409S4		9	445	80
VQ-2412S4		12	333	83
VQ-2415S4		15	267	83
VQ-2418S4		18	223	80
VQ-2424S4		24	167	81
VQ-243R3D4	9-36	±3.3	±600	76
VQ-2405D4		±5	±400	78
VQ-2409D4		±9	±223	80
VQ-2412D4		±12	±167	82
VQ-2415D4		±15	±134	80
VQ-2418D4		±18	±112	80
VQ-2424D4		±24	±84	80
VQ-483R3S4	18-72	3.3	1200	77
VQ-4805S4		5	800	80
VQ-4809S4		9	445	82
VQ-4812S4		12	333	81
VQ-4815S4		15	267	81
VQ-4818S4		18	223	81
VQ-4824S4		24	167	82
VQ-483R3D4	18-72	±3.3	±600	75
VQ-4805D4		±5	±400	79
VQ-4809D4		±9	±223	81
VQ-4812D4		±12	±167	82
VQ-4815D4		±15	±134	81
VQ-4818D4		±18	±112	80
VQ-4824D4		±24	±84	80

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) 60mVQ-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:

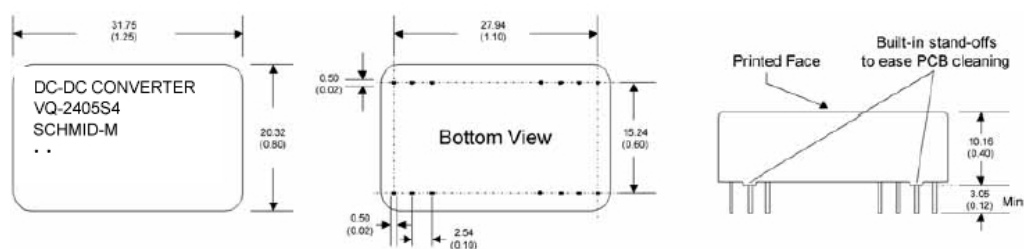
Efficiency 72% ~ 78%
Switching Frequency 260 KHz, Typ.

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.