

V1 SERIES

1 WATT

V1-DS/SS , V1-D/S

Single / Dual Output

- 1000 Vdc Isolation
- 7 Pin SIL // 14 Pin DIL Package
- Low Ripple and Noise
- Unregulated
- Non-conductive Black Plastic case
- MTBF > 2 MHours



Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
V1-0505SS/DS		5	200	78
V1-0509SS/DS		9	111	80
V1-0512SS/DS	5	12	84	80
V1-0515SS/DS		15	67	80
V1-0524SS/DS		24	42	80

V1-0505S/D		±5	±100	72
V1-0509S/D		±9	±56	80
V1-0512S/D	5	±12	±42	80
V1-0515S/D		±15	±34	82
V1-0524S/D		±24	±21	80

V1-1205SS/DS		5	200	78
V1-1209SS/DS		9	111	80
V1-1212SS/DS	12	12	84	80
V1-1215SS/DS		15	67	82
V1-1224SS/DS		24	42	77

V1-1205S/D		±5	±100	72
V1-1209S/D		±9	±56	76
V1-1212S/D	12	±12	±42	78
V1-1215S/D		±15	±34	80
V1-1224S/D		±24	±21	77

V1-2405SS/DS		5	200	80
V1-2409SS/DS		9	111	78
V1-2412SS/DS	24	12	84	78
V1-2415SS/DS		15	67	82
V1-2424SS/DS		24	42	80

V1-2405S/D		±5	±100	72
V1-2409S/D		±9	±56	78
V1-2412S/D	24	±12	±42	78
V1-2415S/D		±15	±34	78
V1-2424S/D		±24	±21	80

1. Input Voltage is from 5 V to 48 V and Output Voltage is from 3.3 V to 24 V.

Input Specifications:

Voltage Range 10%
Filter Capacitors

Isolation Specification:

Rated Voltage 1000 Vdc, standard.
Resistance 1000M Ω, Min.
Capacitance 60 pF, Typ.

Output Specifications:

Voltage Accuracy: ±3%, Max.
Voltage Balance (Dual Outputs) ±1%
Ripple and Noise (at 20 MHz BW) (±) 75mVp-p,Max.
Short Circuit Protection Momentary
Line Voltage Regulation ±1.2% / 1.0% of Vin
Load Voltage Regulation ±8%, Load=20~100%
Temperature Coefficient ±0.02% /

General Specifications:

Efficiency 72% ~ 82%
Switching Frequency 125KHz, Typ.

Environmental Specification:

Operating Temperature (Ambient) -40 ~ +85
Case Temperature 90 , Max.
Storage Temperature -40 ~ +125
Derating None Required
Humidity Up to 90%, Non-condensing
Cooling Free-air Convection

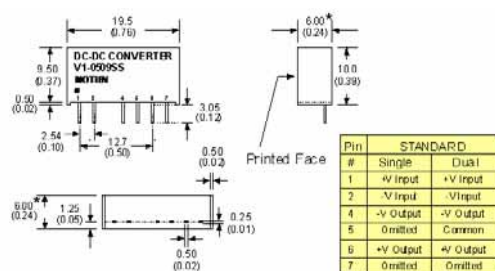
Capacitive Load:

Single Output 200uF , Max.
Dual Output ± 100uF , Max.

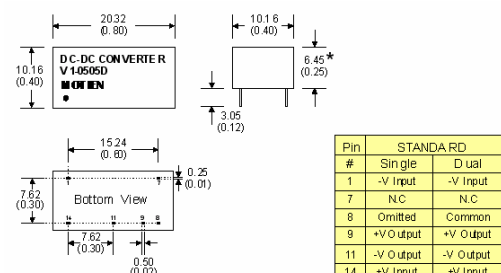
Note: For Vin 48V series, pls. add a capacitor in the input point. Cx = 4.7μF/100V ~ 47μF/100V.

MECHANICAL DIMENSIONS & PIN CONNECTIONS

7 Pin SIL package



14 Pin SIL package



Notes: 1. All dimensions are typical in millimeters (inches). Tolerance x.xx = +/-0.25 (+/-0.01)
2. "*" SIL Package: 7.20 (0.28) for 48 Vdc variants; DIL Package: 6.88 (0.27) for 48 Vdc variants.

V1 SERIES

1 WATT

V1-DS/SSH , V1-D/SH

Single / Dual Output

- 3000 Vdc Isolation
- Up to 6000 Vdc Isolation
- 7 Pin SIL // 14 Pin DIL Package
- Low Ripple and Noise
- Unregulated
- Non-conductive Black Plastic case
- MTBF > 2 MHour



Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
V1-0505SS/DSH		5	200	78
V1-0509SS/DSH		9	111	80
V1-0512SS/DSH	5	12	84	80
V1-0515SS/DSH		15	67	80
V1-0524SS/DSH		24	42	80

V1-0505S/DH		±5	±100	72
V1-0509S/DH		±9	±56	80
V1-0512S/DH	5	±12	±42	80
V1-0515S/DH		±15	±34	82
V1-0524S/DH		±24	±21	80

V1-1205SS/DSH		5	200	78
V1-1209SS/DSH		9	111	80
V1-1212SS/DSH	12	12	84	80
V1-1215SS/DSH		15	67	82
V1-1224SS/DSH		24	42	77

V1-1205S/DH		±5	±100	72
V1-1209S/DH		±9	±56	76
V1-1212S/DH	12	±12	±42	78
V1-1215S/DH		±15	±34	80
V1-1224S/DH		±24	±21	77

V1-2405SS/DSH		5	200	80
V1-2409SS/DSH		9	111	78
V1-2412SS/DSH	24	12	84	78
V1-2415SS/DSH		15	67	82
V1-2424SS/DSH		24	42	80

V1-2405S/DH		±5	±100	72
V1-2409S/DH		±9	±56	78
V1-2412S/DH	24	±12	±42	78
V1-2415S/DH		±15	±34	78
V1-2424S/DH		±24	±21	80

1. Suffix "H4" means 4 KV Isolation, suffix "H5" means 5.2 KV Isolation, suffix "H6" means 6 KV Isolation.
2. Input Voltage is from 5 V to 48 V and Output Voltage is from 3.3 V to 24 V.

Input Specifications:

Voltage Range 10%
Filter Capacitors

Isolation Specification:

Rated Voltage 3000 Vdc.
Resistance 1000M Ω, Min.
Capacitance 60 pF, Typ.

Output Specifications:

Voltage Accuracy: ±3%, Max.
Voltage Balance (Dual Outputs) ±1%
Ripple and Noise (at 20 MHz BW) (±) 75mVp-p,Max.
Short Circuit Protection Momentary
Line Voltage Regulation ±1.2% / 1.0% of Vin
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General Specifications:

Efficiency 72% ~ 82%
Switching Frequency 125KHz, Typ.

Environmental Specification:

Operating Temperature (Ambient) -40 ~ +85
Case Temperature 90 , Max.
Storage Temperature -40 ~ +125
Derating None Required
Humidity Up to 90%, Non-condensing
Cooling Free-air Convection

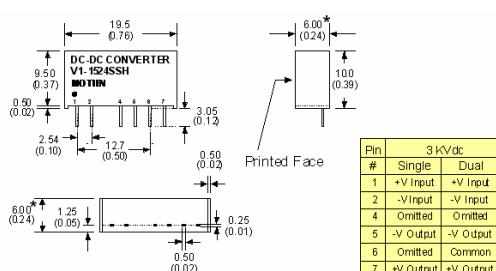
Capacitive Load:

Single Output 200uF , Max.
Dual Output ± 100uF , Max.

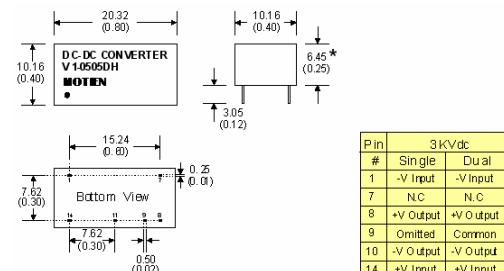
Note: For Vin 48V series, pls. add a capacitor in the input point. Cx = 4.7μF/100V ~ 47μF/100V.

MECHANICAL DIMENSIONS & PIN CONNECTIONS

7 Pin SIL package



14 Pin SIL package



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2. "*" SIL Package: 7.20 (0.28) for 48 Vdc variants; DIL Package: 6.88 (0.27) for 48 Vdc variants.