

# V3 SERIES

## 2 WATT

### V3-SS/DS , V3-S/D

### 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 (%)
V3-0505SS/DS		5	400	79
V3-0509SS/DS		9	222	84
V3-0512SS/DS	5	12	167	86
V3-0515SS/DS		15	133	84
V3-0524SS/DS		24	83	85
V3-0505S/D		±5	±200	73
V3-0509S/D		±9	±111	78
V3-0512S/D	5	±12	±84	80
V3-0515S/D		±15	±67	82
V3-0524S/D		±24	±42	81
V3-1205SS/DS		5	400	79
V3-1209SS/DS		9	222	84
V3-1212SS/DS	12	12	167	86
V3-1215SS/DS		15	133	85
V3-1224SS/DS		24	83	84
V3-1205S/D		±5	±200	75
V3-1209S/D		±9	±111	81
V3-1212S/D	12	±12	±84	83
V2-1215S/D		±15	±67	85
V2-1224S/D		±24	±42	86
V3-2405SS/DS		5	400	82
V3-2409SS/DS		9	222	84
V3-2412SS/DS	24	12	167	88
V3-2415SS/DS		15	133	85
V3-2424SS/DS		24	83	86
V3-2405S/D		±5	±200	77
V3-2409S/D		±9	±111	83
V3-2412S/D	24	±12	±84	84
V3-2415S/D		±15	±67	85
V3-2424S/D		±24	±42	88

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 73% ~ 86%  
Switching Frequency 125KHz, Typ.

#### Environmental Specification:

Operating Temperature (Ambient) -40 ~ +85  
Case Temperature 100 , Max.  
Storage Temperature -40 ~ +125  
Derating None Required  
Humidity Up to 90%, Non-condensing  
Cooling Free-air Convection

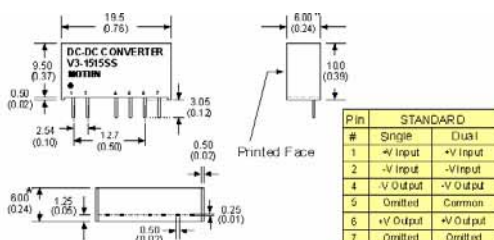
#### Capacitive Load:

Single Output 470µF, Max.  
Dual Output ± 390µF, Max.

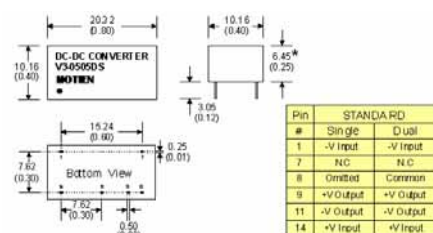
**Note:** For Vin 48V series, pls. add a capacitor in the input point. Cx = 4.7µF/100V ~ 47µF/100V.

### 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.

# V3 SERIES

## 2 WATT

### V3-SS/DSH, V3-S/DH

### 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 MHours



Model Number	Input Vdc	Output Vdc	Output Current (mA)	Efficiency @FL (%)
V3-0505SS/DSH		5	400	79
V3-0509SS/DSH		9	222	84
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V3-0515SS/DSH		15	133	84
V3-0524SS/DSH		24	83	85
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V3-0505S/DH		±5	±200	73
V3-0509S/DH		±9	±111	78
V3-0512S/DH	5	±12	±84	80
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-----				
V3-1205S/DH		±5	±200	75
V3-1209S/DH		±9	±111	81
V3-1212S/DH	12	±12	±84	83
V2-1215S/DH		±15	±67	85
V2-1224S/DH		±24	±42	86
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-----				
V3-2405S/DH		±5	±200	77
V3-2409S/DH		±9	±111	83
V3-2412S/DH	24	±12	±84	84
V3-2415S/DH		±15	±67	85
V3-2424S/DH		±24	±42	88

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

#### 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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Humidity Up to 90%, Non-condensing  
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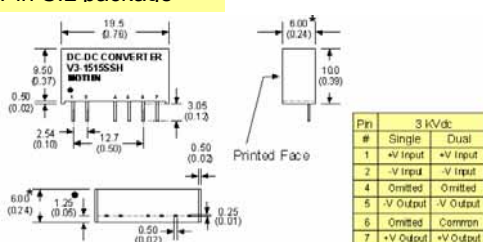
#### Capacitive Load:

Single Output 470µF, Max.  
Dual Output ± 390µF, Max.

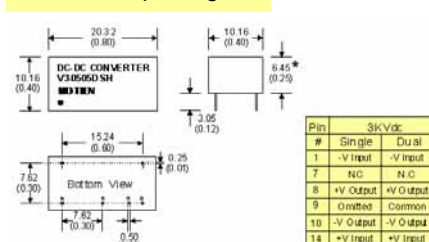
**Note:** For Vin 48V series, pls. add a capacitor in the input point. Cx = 4.7µF/100V ~ 47µF/100V.

### 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.  
3. " " 2.00 (0.08) for Isolation > 3 KVdc.