

CD Series Single Output DC/DC Converters

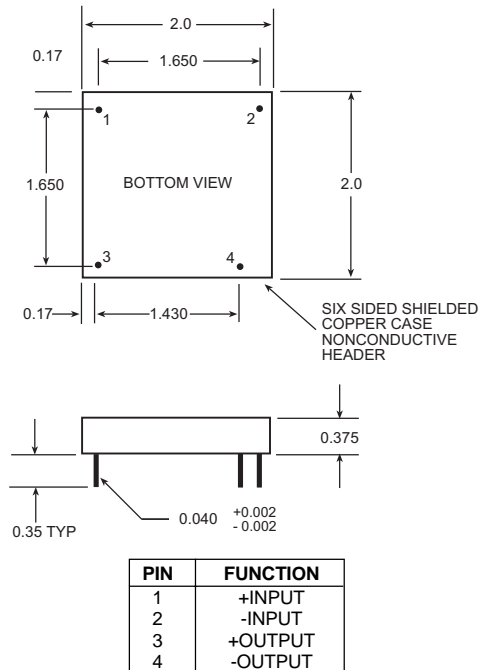
Model 15S5.135CD Specifications

| Model | 15S5.135CD | | |
|-------------------------------------|-------------------|--------------------------------|--|
| Features | Current Input | | |
| Power | 0.675 Watts | | |
| Input Parameters | | | |
| Rated Input Current Range | min typ max | 55.0 mA 60.0 mA 200.0 mA | |
| Switching Frequency | typ | 50 kHz | |
| Output Parameters | | | |
| Output Voltage | min max | 4.850 5.250 | |
| Rated Load | min max | 50 mA 135 mA | |
| Noise, 0 to 20 MHz bw | typ max | 20 mV p-p 60 mV p-p | |
| General Specifications | | | |
| Isolation | | | |
| Isolation Voltage 10µA Leakage | min | 500 VDC | |
| Capacitance | typ | 70 pF | |
| Environmental | | | |
| Case Operating Temperature Range | min max | 0°C 80°C | |
| Storage Temperature Range | min max | -25°C 90°C | |

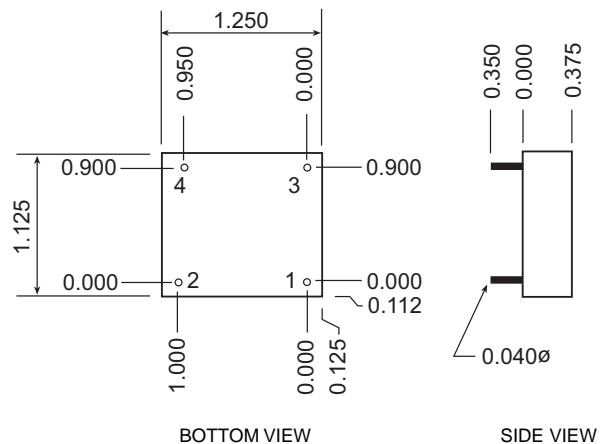
Model 5S48.65CD Specifications

| Model | 5S48.65CD | | |
|---|-------------------|----------------------------------|--|
| Features | Relay Driver | | |
| Power | 3.12 Watts | | |
| Input Parameters | | | |
| Input Voltage Range | min typ max | 4.6 VDC 5.0 VDC 6.5 VDC | |
| Efficiency | typ | 85% | |
| Switching Frequency | typ | 120 kHz | |
| Output Parameters | | | |
| Output Voltage | min typ max | 47.3 VDC 48.0 VDC 48.7 VDC | |
| Rated Load | min max | 0 mA 65 mA | |
| Load Regulation No Load to Full Load | typ max | 8% 12% | |
| Line Regulation Vin = 4.6 to 6.5 VDC | typ | 1.1% / %Vin | |
| Noise, 0 to 20 MHz bw | typ max | 100 mV p-p 150 mV p-p | |
| General Specifications | | | |
| Isolation | | | |
| Isolation Voltage Input to Output | min | 700 VDC | |
| Input to Output Capacitance | typ | 30 pF | |
| Environmental | | | |
| Case Operating Temperature Range | min max | -25°C 85°C | |
| Storage Temperature Range | min max | -40°C 105°C | |

Model 15S5.135CD Case Dimension



Model 5S48.65CD Case Dimension



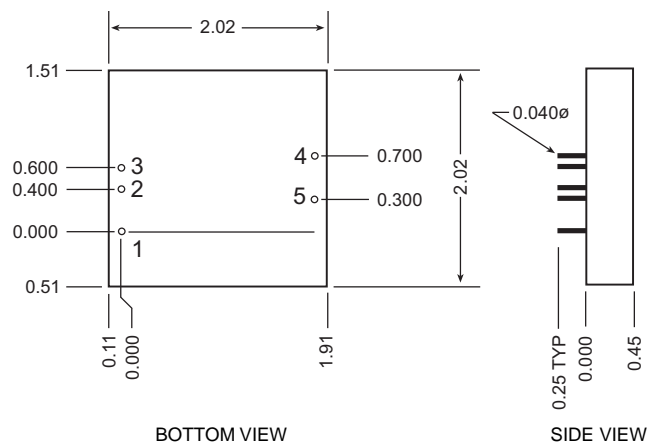
Mechanical tolerances unless otherwise noted:
 X.XX = ±0.020
 X.XXX = ±0.010

CD Series Single Output DC/DC Converters

Model 48S5.3000CD Specifications

| Model | 48S5.3000CD | |
|--|-------------------|-------------------------------------|
| Features | Wide Input Range | |
| Power | 15.0 Watts | |
| Input Parameters | | |
| Input Voltage Range | min typ max | 18.0 VDC 48.0 VDC 72.0 VDC |
| Efficiency | typ | 80% |
| Switching Frequency | typ | 220 kHz |
| Output Parameters | | |
| Output Voltage | min typ max | 4.925 VDC 5.000 VDC 5.075 VDC |
| Rated Load Range | min max | 500 mA 3000 mA |
| Load Regulation Min to Max Load | typ max | 0.2% 0.4% |
| Line Regulation Vin = Min to Max | typ max | 0.03% 0.20% |
| Noise, 0 to 20 MHz bw | typ | 50 mV p-p |
| General Specifications | | |
| Isolation | | |
| Isolation Voltage Input to Output 10 μ A Leakage | min | 1544 VDC |
| Input to Output Capacitance | typ | 400 pF |
| Environmental | | |
| Case Operating Temperature Range, No Derating | min max | -40°C 85°C |
| Storage Temperature Range | min max | -55°C 105°C |

Model 48S5.3000CD Case Dimension

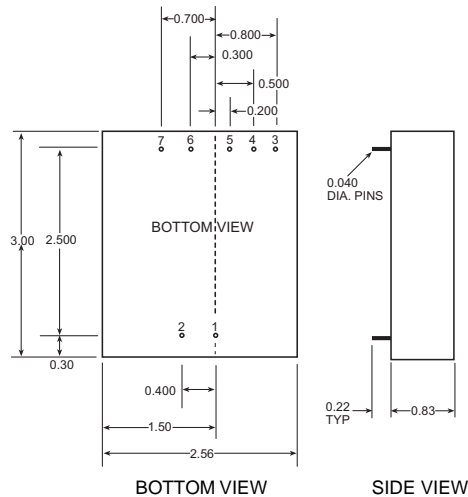


| PIN | FUNCTION |
|-----|----------|
| 1 | CASE |
| 2 | -INPUT |
| 3 | +INPUT |
| 4 | +5V |
| 5 | CMN |

Model 12S5.3000CD Specifications

| Model | 12S5.3000CD | |
|---|----------------------|-------------------------------------|
| Features | Undervoltage Lockout | |
| Power | 15.0 Watts | |
| Input Parameters | | |
| Input Voltage Range | min typ max | 7.0 VDC 12.0 VDC 40.0 VDC |
| Switching Frequency | typ | 100 kHz |
| Output Parameters | | |
| Output Voltage | min typ max | 4.950 VDC 5.000 VDC 5.050 VDC |
| Rated Load | min max | 0.0 mA 3000 mA |
| Load Regulation 0 to 100% Full Load | typ max | 0.2% 0.5% |
| Line Regulation Vin = Min to Max VDC | typ max | 0.2% 0.5% |
| Noise, 0 to 20 MHz bw | typ max | 20 mV p-p 60 mV p-p |
| General Specifications | | |
| Environmental | | |
| Case Operating Temperature Range | min max | -25°C 80°C |
| Storage Temperature Range | min max | -55°C 90°C |

Model 12S5.300CD Case Dimension



| PIN | FUNCTION |
|-----|-------------|
| 1 | +INPUT |
| 2 | -INPUT |
| 3 | +SENSE |
| 4 | OUTPUT TRIM |
| 5 | -SENSE |
| 6 | +OUTPUT |
| 7 | CMN |

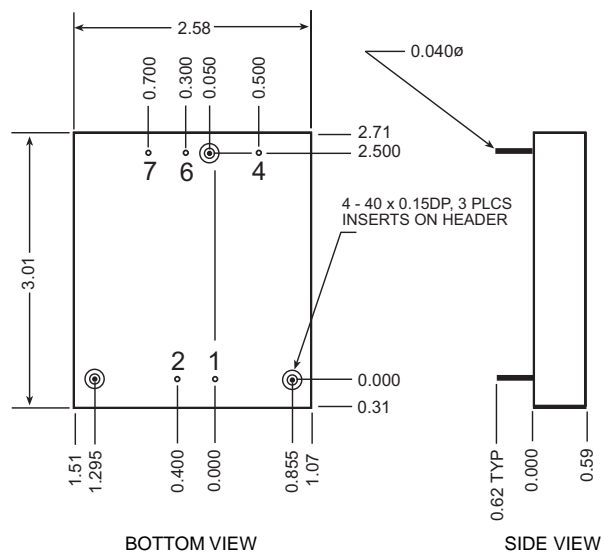
Mechanical tolerances unless otherwise noted:
 X.XX = ± 0.020 inches
 X.XXX = ± 0.005 inches

CD Series Single Output DC/DC Converters

Model 24S8.2500CD Specifications

| Model | 24S8.2500CD | | |
|---|-------------------|-------------------------------------|--|
| Features | Low Profile Case | | |
| Power | 20.0 Watts | | |
| Input Parameters | | | |
| Input Voltage Range | min typ max | 18.0 VDC 24.0 VDC 32.0 VDC | |
| Efficiency | typ | 85% | |
| Switching Frequency | typ | 110 kHz | |
| Output Parameters | | | |
| Output Voltage | min typ max | 7.920 VDC 8.000 VDC 8.080 VDC | |
| Rated Current | min max | 100 mA 2500 mA | |
| Load Regulation, 0 to 100% | typ max | 0.1% 0.5% | |
| Line Regulation Vin = Min To Max VDC | typ max | 0.05% 0.2% | |
| Noise, 0 to 20 MHz bw | typ max | 30 mV p-p 60 mV p-p | |
| General Specifications | | | |
| Isolation | | | |
| Isolation Voltage Input to Output | min | 700 VDC | |
| Input to Output Capacitance | typ | 80 pF | |
| Environmental | | | |
| Case Operating Temperature Range | min max | -25°C 85°C | |
| Storage Temperature Range | min max | -55°C 100°C | |

Model 24S8.2500CD Case Dimension



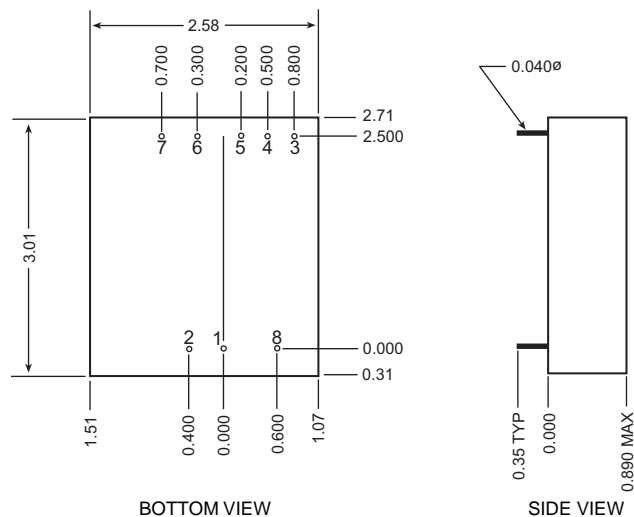
Mechanical tolerances unless otherwise noted:
 X.XX = ±0.020 inches
 X.XXX = ±0.005 inches
 Seal around terminals is not hermetic.
 Do not immerse units in any liquid.

| PIN | FUNCTION |
|-----|----------|
| 1 | +INPUT |
| 2 | -INPUT |
| 4 | N/C |
| 6 | +B OUT |
| 7 | CMN |

Model 48S8.3000CD Specifications

| Model | 48S8.3000CD | | |
|--|-------------------|-------------------------------------|--|
| Features | On/Off Function | | |
| Power | 24.0 Watts | | |
| Input Parameters | | | |
| Input Voltage Range | min typ max | 30.0 VDC 48.0 VDC 60.0 VDC | |
| Efficiency | typ | 80% | |
| Switching Frequency | typ | 220 kHz | |
| Output Parameters | | | |
| Output Voltage | min typ max | 7.920 VDC 8.000 VDC 8.080 VDC | |
| Rated Current | min max | 0 mA 3000 mA | |
| Load Regulation, 0 to 100% | typ max | 0.05% 0.5% | |
| Line Regulation Vin - Min to Max VDC | typ max | 0.05% 0.5% | |
| Noise, 0 to 20 MHz bw | typ max | 25 mV p-p | |
| General Specifications | | | |
| Isolation | | | |
| Isolation Voltage Input to Output | min | 700 VDC | |
| Environmental | | | |
| Case Operating Temperature Range No Derating | min max | -25°C 85°C | |
| Storage Temperature Range | min max | -55°C 100°C | |

Model 48S8.3000CD Case Dimension



Mechanical tolerances unless otherwise noted:
 X.XX = ±0.020
 X.XXX = ±0.005

| PIN | FUNCTION |
|-----|-------------|
| 1 | +INPUT |
| 2 | -INPUT |
| 3 | +SENSE |
| 4 | OUTPUT TRIM |
| 5 | -SENSE |
| 6 | +OUTPUT |
| 7 | OUTPUT CMN |
| 8 | ON/OFF |

CD Series Single Output DC/DC Converters

Model 12S5.7000CD Specifications

| | | |
|-----------------|------------------------|--|
| Model | 12S5.7000CD | |
| Features | Automotive Application | |
| Power | 35.0 Watts | |

Input Parameters

| | | |
|---------------------------------------|-------------------|---------------------------------|
| Input Voltage Range | min typ max | 4.0 VDC 12.0 VDC 18.0 VDC |
| Efficiency Vin = 12 VDC, 100% Load | typ | 73% |
| Switching Frequency | typ | 170 kHz |

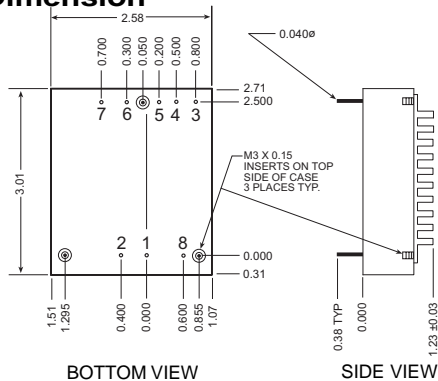
Output Parameters

| | | |
|--|-------------------|-------------------------------------|
| Output Voltage | min typ max | 4.950 VDC 5.000 VDC 5.050 VDC |
| Rated Load | min max | 0 mA 7000 mA |
| Load Regulation 25% to 100% Full Load | typ max | 0.02% 0.1% |
| Line Regulation | | |
| Vin = 8 to 18 VDC, Load = 7A | typ max | 0.04% 0.2% |
| Vin = 4 to 18 VDC, Load = 4A | typ max | 0.04% 0.4% |
| Vin = 4.5 to 8 VDC, Load = 7A | typ max | 0.2% 2.0% |
| Vin = 4 to 8 VDC, Load = 7A | typ max | 0.5% 5.0% |
| Noise, 0 to 20 MHz bw | typ | 40 mV p-p |

General Specifications

| | | |
|-------------------------------------|------------|----------------|
| Isolation | | |
| Isolation Voltage | min | 700 VDC |
| Input to Output 10µA Leakage | | |
| Input to Output Capacitance | typ | 500 pF |
| Environmental | | |
| Case Operating Temperature Range | min max | -40°C 85°C |
| Storage Temperature Range | min max | -55°C 100°C |

Model 12S5.7000CD Case Dimension



| PIN | FUNCTION |
|-----|----------|
| 1 | +INPUT |
| 2 | -INPUT |
| 3 | +SENSE |
| 4 | TRIM |
| 5 | -SENSE |
| 6 | +OUTPUT |
| 7 | CMN |
| 8 | ON/OFF |

Mechanical tolerances unless
otherwise noted:
X.XX = ±0.020 inches
X.XXX = ±0.005 inches