

Picture coming soon

**FEATURES:**

- Wide 4:1 Input Voltage Range
- High efficiency up to 88%
- 1500 VDC Isolation
- Over Current Protection
- No load consumption  $\leq 0.12W$
- Operating Temperature  $-40^{\circ}C$  to  $+85^{\circ}C$
- Output Over Voltage protection
- Continuous Short Circuit Protection
- Input Under voltage Protection

**Models**

**Single output**



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load( $\mu$ F)	Efficiency (%)
AM6CW-2403S-NZ	9-36	3.3	1500	1500	1800	79
AM6CW-2405S-NZ	9-36	5	1200	1500	1000	83
AM6CW-2409S-NZ	9-36	9	667	1500	680	85
AM6CW-2412S-NZ	9-36	12	500	1500	470	87
AM6CW-2415S-NZ	9-36	15	400	1500	220	88
AM6CW-2424S-NZ	9-36	24	250	1500	100	88
AM6CW-4803S-NZ	18-75	3.3	1500	1500	1800	79
AM6CW-4805S-NZ	18-75	5	1200	1500	1000	83
AM6CW-4812S-NZ	18-75	12	500	1500	470	87
AM6CW-4815S-NZ	18-75	15	400	1500	220	88
AM6CW-4824S-NZ	18-75	24	250	1500	100	88
AM6CW-11005S-NZ	40-160	5	1200	1500	1000	81
AM6CW-11012S-NZ	40-160	12	500	1500	100	83
AM6CW-11015S-NZ	40-160	15	400	1500	100	85
AM6CW-11024S-NZ	40-160	24	250	1500	47	85

**Models**

**Dual output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load( $\mu$ F)	Efficiency (%)
AM6CW-2405D-NZ	9-36	$\pm 5$	$\pm 600$	1500	470	83
AM6CW-2412D-NZ	9-36	$\pm 12$	$\pm 250$	1500	100	87
AM6CW-2415D-NZ	9-36	$\pm 15$	$\pm 200$	1500	100	88
AM6CW-2424D-NZ	9-36	$\pm 24$	$\pm 125$	1500	100	88
AM6CW-4805D-NZ	18-75	$\pm 5$	$\pm 600$	1500	470	83
AM6CW-4812D-NZ	18-75	$\pm 12$	$\pm 250$	1500	100	87
AM6CW-4815D-NZ	18-75	$\pm 15$	$\pm 200$	1500	100	88

NOTE: All specifications in this datasheet are measured at an ambient temperature of  $25^{\circ}C$ , humidity  $< 75\%$ , nominal input voltage and at rated output load unless otherwise specified.

**Input Specifications**

Parameters	Nominal	Typical	Maximum	Units
Voltage range	24 48 110	9-36 18-75 40-160		VDC
Filter		Pi		
Absolute Maximum Rating (100ms)	24 48 110		-0.7 - 50 -0.7 - 100 -0.7 - 180	VDC
No Load Input Current	24 48 110		12 8 5	mA
Input reflected current		20		mA
Input Under voltage turn off*	24 48	6.5 15.5		VDC

\*24 & 48V input models only.

## Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	60 sec, <1mA	1500		VDC
Resistance	500VDC		>1000	MOhm
Capacitance		1000		pF

## Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2		%
Voltage balance (Dual Output Models)	Balanced Load	±1.5		%
Over voltage protection		110-160		% of Vout
Over current protection	24 & 48V input models only	110-190		% of Iout
Short Circuit protection		Continuous		
Short circuit restart		Auto-Recovery		
Line voltage regulation (Single)	Full load, LL to HL	±0.5		% of Vin
Line voltage regulation (Dual)	Full load, LL to HL	±1		% of Vin
Load voltage regulation (Single)	5% to 100% load	±1		%
Load voltage regulation (Dual)	5% to 100% load	±1.5		%
Cross Regulation (Dual Output Models)	25% load on one output - 100% load on second load	±5		%
Temperature coefficient	100% load		±0.03	%/°C
Ripple & Noise		100		mV p-p
Transient recovery time	25% load step change		1	mS
Transient recovery deviation	25% load step change		±8	%

## General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	300		KHz
Operating temperature	Derating above 71°C	-40 to +85		°C
Storage temperature		-55 to +125		°C
Maximum case temperature			100	°C
Cooling		Free air convection		
Humidity			95	% RH
Case material		Aluminum Alloy		
Weight		14		g
Dimensions (L x W x H)		1 x 1 x 0.46 inches 25.40 x 25.40 x 11.70 mm		
MTBF		>1,000,000 hours (MIL-HDBK -217F, Ground Benign, t=+25°C)		
Maximum soldering temperature	1.5mm from case for 10 sec		300	°C

## Environmental Specifications

Parameters		
Vibration	Test mode	5-150Hz
	Acceleration	2G, 30min one cycle, every axis tested
	Displacement	7.5mm

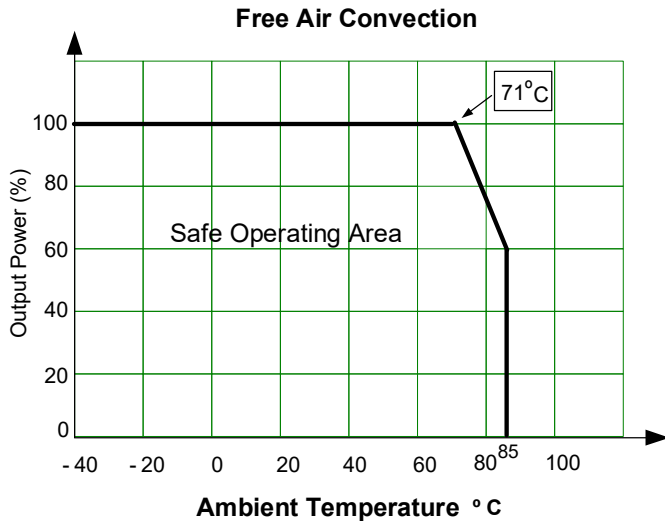
## Safety Specifications

Parameters	
Approval	CE, UL
Standards	EN 55022, class B (with the recommended EMC circuit) ICE/EN/UL 60950-1

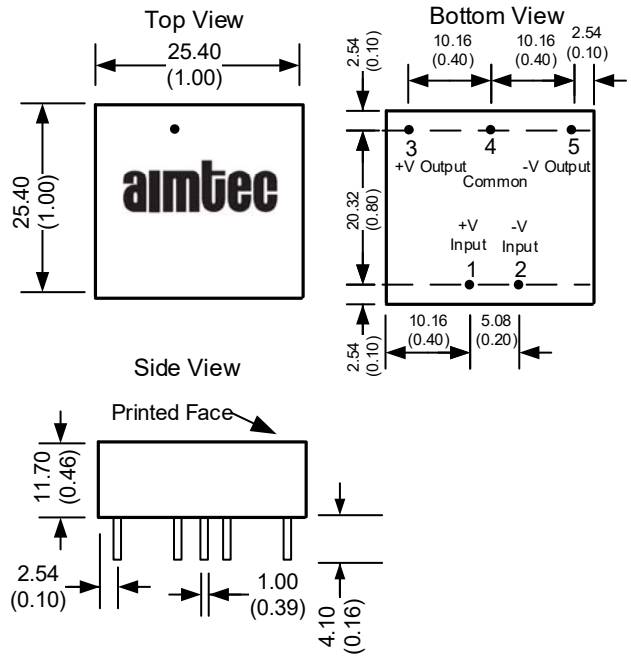
## Pin Out Specifications

Pin	Single	Dual
1	+V Input	+V Input
2	-V Input	-V Input
3	+V Output	+V Output
4	No pin	Common
5	-V Output	-V Output

## Derating



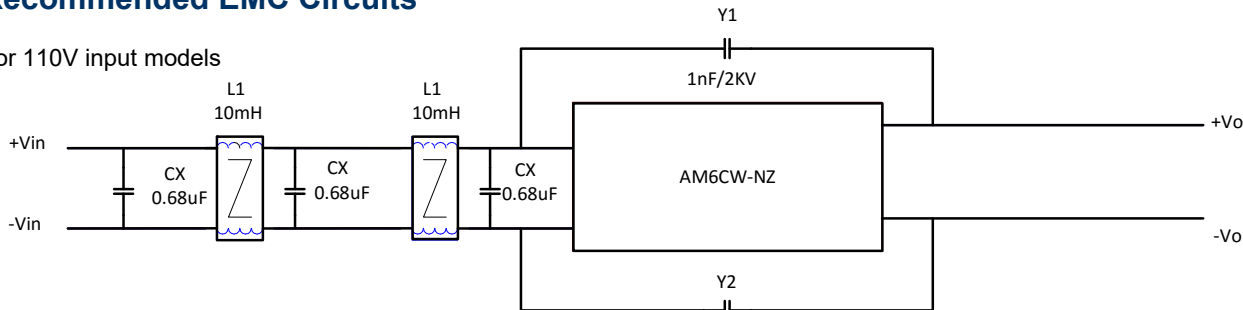
## Dimensions



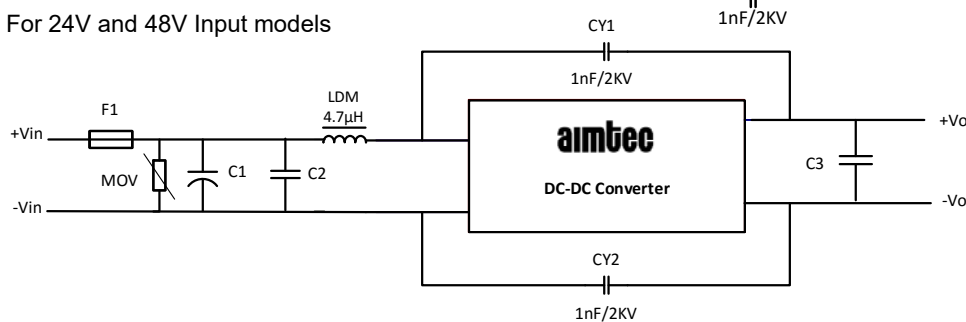
Notes: All dimensions are typical in millimeters (inches).  
Case Tolerance  $\pm 0.25$  ( $\pm 0.01$ )  
Pin diameter tolerance  $\pm 0.1$  ( $\pm 0.004$ )  
Pin height tolerance  $\pm 0.5$  ( $\pm 0.02$ )

## Recommended EMC Circuits

For 110V input models



For 24V and 48V Input models



	24V input	48V input
MOV	S14K35	S14K60
C1	330 $\mu$ F/50V	330 $\mu$ F/100V
C2	1 $\mu$ F/50V	1 $\mu$ F/100V
C3	10 $\mu$ F/50V	10 $\mu$ F/100V

**NOTE:** 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to [www.aimtec.com](http://www.aimtec.com) for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity < 75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other than the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at [www.aimtec.com](http://www.aimtec.com).