

Picture coming soon

FEATURES:

- Wide input voltage range (2:1)
- Efficiency up to 88%
- Isolation voltage of 1500VDC
- Input under voltage lockout
- Operating temperature: -40 °C to +85 °C
- No load consumption ≤ 0.12W
- Continuous Short Circuit Protection
- Over Current, Over Voltage Protection

Models
Single output



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load(μF)	Efficiency (%)
AM6C-1203S-NZ	9-18	3.3	1500	1500	1800	76
AM6C-1205S-NZ	9-18	5	1200	1500	1000	81
AM6C-1212S-NZ	9-18	12	500	1500	470	85
AM6C-1215S-NZ	9-18	15	400	1500	100	85
AM6C-1224S-NZ	9-18	24	250	1500	47	86
AM6C-2403S-NZ	18-36	3.3	1500	1500	1800	77
AM6C-2405S-NZ	18-36	5	1200	1500	1000	82
AM6C-2412S-NZ	18-36	12	500	1500	470	85
AM6C-2415S-NZ	18-36	15	400	1500	220	86
AM6C-2424S-NZ	18-36	24	250	1500	100	87
AM6C-4803S-NZ	36-75	3.3	1500	1500	1800	79
AM6C-4805S-NZ	36-75	5	1200	1500	1000	83
AM6C-4812S-NZ	36-75	12	500	1500	100	87
AM6C-4815S-NZ	36-75	15	400	1500	100	88
AM6C-4824S-NZ	36-75	24	250	1500	47	88

Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load(μF)	Efficiency (%)
AM6C-1205D-NZ	9-18	±5	±600	1500	470	81
AM6C-1212D-NZ	9-18	±12	±250	1500	100	85
AM6C-1215D-NZ	9-18	±15	±200	1500	100	85
AM6C-2405D-NZ	18-36	±5	±600	1500	470	83
AM6C-2412D-NZ	18-36	±12	±250	1500	100	87
AM6C-2415D-NZ	18-36	±15	±200	1500	100	87
AM6C-2424D-NZ	18-36	±24	±125	1500	47	87
AM6C-4805D-NZ	36-75	±5	±600	1500	470	83
AM6C-4812D-NZ	36-75	±12	±250	1500	100	87
AM6C-4815D-NZ	36-75	±15	±200	1500	100	88
AM6C-4824D-NZ	36-75	±24	±125	1500	47	88

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

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	12	9-18		VDC
	24	18-36		
	48	36-75		
Filter	π(Pi) Network			
Input under-voltage lockout	12		5.5 - 6.5	VDC
	24		14 - 15.5	
Absolute Maximum Rating	12		-0.7 - 25	VDC
	24		-0.7 - 50	
	48		-0.7 - 100	

Input Specifications (continued)

Parameters	Nominal	Typical	Maximum	Units
Peak Input Voltage time			1	s
No Load Input Current	12 24 48		25 15 7	mA
Input reflected current		20		mA

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	1 min, ≤1mA		1500	VDC
Resistance	Isolation 500VDC	>1000		MOhm
Capacitance	100kHz, 0.1V	1000		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±2	±3	%
Voltage balance (Dual Output Models)	Balanced Load	±1.5		%
Cross Regulation (Dual Output Models)	50% load on one output – 10% to 100% load on second load		±5	%
Over voltage protection		110-160		% of Vout
Short Circuit protection		Continuous, Auto recovery		
Over current protection		110-190		% of Iout
Line voltage regulation	LL-HL, full load	±1		% of Vin
Load voltage regulation	5% -100% load	±1.5		%
Temperature coefficient	Full load	±0.03		%/°C
Ripple & Noise	20MHz Bandwidth	75		mV p-p
Transient recovery time	25% load step change	500		µs
Transient recovery deviation	25% load step change	±5	±8	%

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	300		KHz
Operating temperature	With derating above 71°C		-40 to +85	°C
Storage temperature		-55 to +125		°C
Maximum case temperature			105	°C
Cooling		Free 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	10sec, 1.5mm from case		300	°C

Environmental Specifications

Parameters		
Vibration	Test mode	10-55Hz
	Acceleration	10G, 30min one cycle, every axis tested

Safety Specifications

Parameters		
Standards	Information Technology Equipment	EN55022 Class B, with the recommended circuit below, EN55024
	Electrostatic Discharge Immunity	IEC 61000-4-2, Contact ±4KV, Criteria B
	RF, Electromagnetic Field Immunity	IEC 61000-4-3, 10V/m, Criteria A
	Electrical Fast Transient / Burst Immunity	IEC 61000-4-4, ±2KV, Criteria B, with the recommended circuit below
	Surge Immunity	IEC 61000-4-5, ±2KV, Criteria B, with the recommended circuit below
	RF, Conducted Disturbance Immunity	IEC 61000-4-6, 3 Vrms, Criteria A

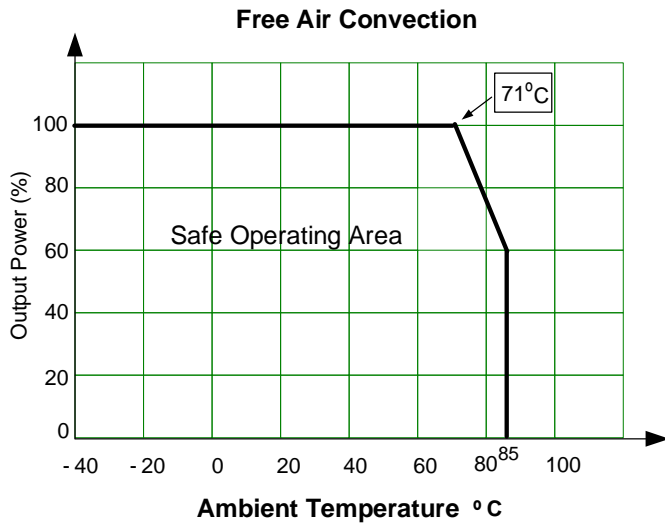
Voltage dips, Short interruptions and Voltage Variations Immunity

IEC61000-4-29, 0-70%, Criteria B

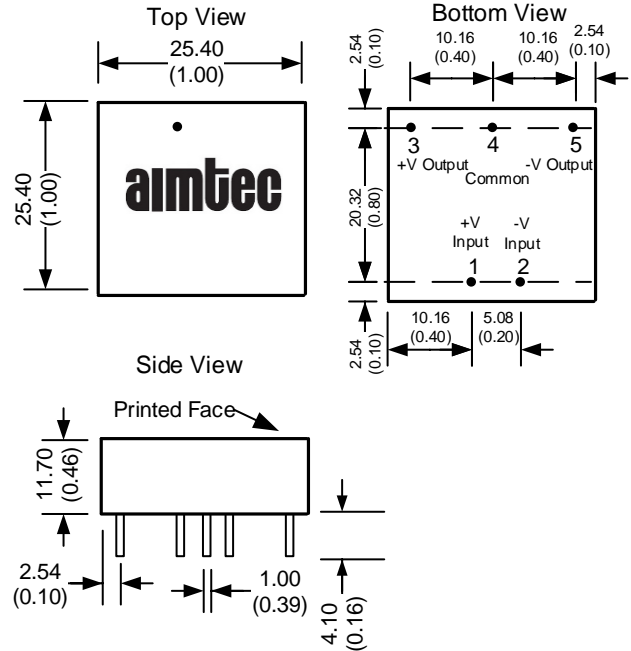
Pin Out Specifications

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

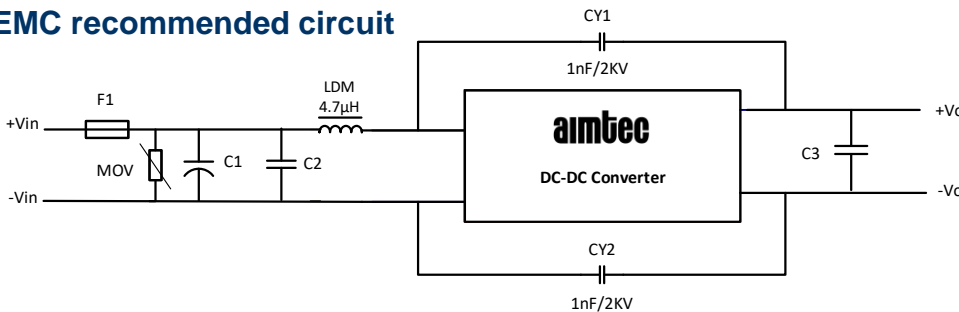


Dimensions



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

EMC recommended circuit



	12V input	24V input	48V input
MOV	S14K20	S20K30	S14K60
C1	1000µF/35V	1000µF/50V	330µF/100V
C2	1µF/50V		1µF/100V
C3	10µF/50V		10µF/100V

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