

FEATURES:



- RoHS compliant
- Ultra wide 4:1 input range
- Remote On/Off Control
- 9 pin SIP package
- Operating temperature -40°C to + 85°C
- Continuous Short circuit protection
- High efficiency up to 76%
- Low ripple and noise


Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load (μF)	Efficiency
AM2GW-2405S-NZ	9-36	5	400	1500	820	75
AM2GW-4805S-NZ	18-72	5	400	1500	820	76

* The model AM2GW-2405S-NZ will be discontinued (EOL) by December 30, 2020; For new design, please refer to model AM3HW-2405S-NZ.

** The model AM2GW-4805S-NZ is not recommended for new designs; For new design, please refer to model AM3HW-4805S-NZ.

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	24 48	9-36 18-72		VDC
Filter	Capacitor			
Maximum Rating	24 Vin 48 Vin	40 80		VDC
Peak Input Voltage time		100		ms
On/Off Control	ON – low or open; OFF – high			
On/Off input current		5	10	mA

* Exceeding the maximum permissible value of 20mA for the Input On/Off current will damage the converter.

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested/I/O voltage	60 sec		1500	VDC
Resistance	At 500VDC	> 1000		MOhm
Capacitance		80		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±3		%
Short Circuit protection		Continuous		
Short Circuit restart		Auto recovery		
Line voltage regulation	LL~HL	±0.75		%
Load voltage regulation	Load 10~100%	±1.5		%
Temperature coefficient		±0.03		%/°C
Ripple & Noise	At 20MHz Bandwidth	100		mV p-p

General Specifications

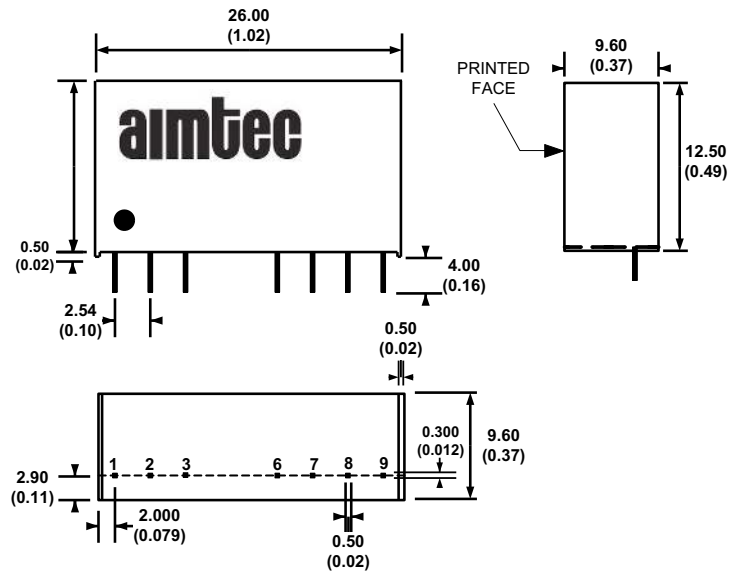
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load, Vin nominal	>100	550	KHz
Operating temperature	With derating above 71°C	-40 to +85		°C
Storage temperature		-50 to +125		°C
Temperature rise	Full load	15	35	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Non-conductive black plastic (UL94V-0 rated)			
Weight		7		g
Dimensions (L x W x H)		1.02 x 0.37x 0.49 inch		26.00 x 9.60 x 12.00 mm
MTBF	>1 000 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			

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

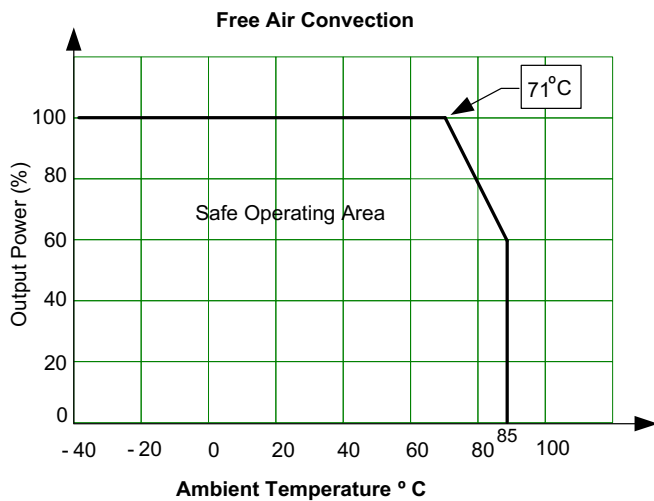
Pin Out Specifications

Pin	Single
1	- V Input
2	+ V Input
3	On/Off Control
6	+ V Output
7	N.C.
8	N.C.
9	- V Output

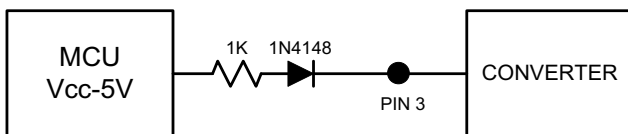
Dimensions



Derating



Control ON/OFF pin connection example:



The voltage could be applied through a limiting resistor and a switching diode. The converter is in a low power mode during high level phase.

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 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.