Series AM2GW-NZ

2 Watt | DC-DC Converter

RoHS

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 82%
- 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-2403S-NZ	9-36	3.3	500	1500	1200	73
AM2GW-2405S-NZ	9-36	5	400	1500	820	75
AM2GW-2409S-NZ	9-36	9	222	1500	680	78
AM2GW-2412S-NZ	9-36	12	167	1500	470	82
AM2GW-2415S-NZ	9-36	15	133	1500	330	81
AM2GW-4803S-NZ	18-72	3.3	500	1500	1200	72
AM2GW-4805S-NZ	18-72	5	400	1500	820	76
AM2GW-4809S-NZ	18-72	9	222	1500	680	78
AM2GW-4812S-NZ	18-72	12	167	1500	470	81
AM2GW-4815S-NZ	18-72	15	133	1500	330	80

Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load (µF)	Efficiency (%)
AM2GW-2405D-NZ	9-36	±5	±200	1500	±330	76
AM2GW-2409D-NZ	9-36	±9	±111	1500	±270	78
AM2GW-2412D-NZ	9-36	±12	±83	1500	±220	82
AM2GW-2415D-NZ	9-36	±15	±67	1500	±180	81
AM2GW-4805D-NZ	18-72	±5	±200	1500	±330	75
AM2GW-4809D-NZ	18-72	±9	±111	1500	±270	77
AM2GW-4812D-NZ	18-72	±12	±83	1500	±220	81
AM2GW-4815D-NZ	18-72	±15	±67	1500	±180	80

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

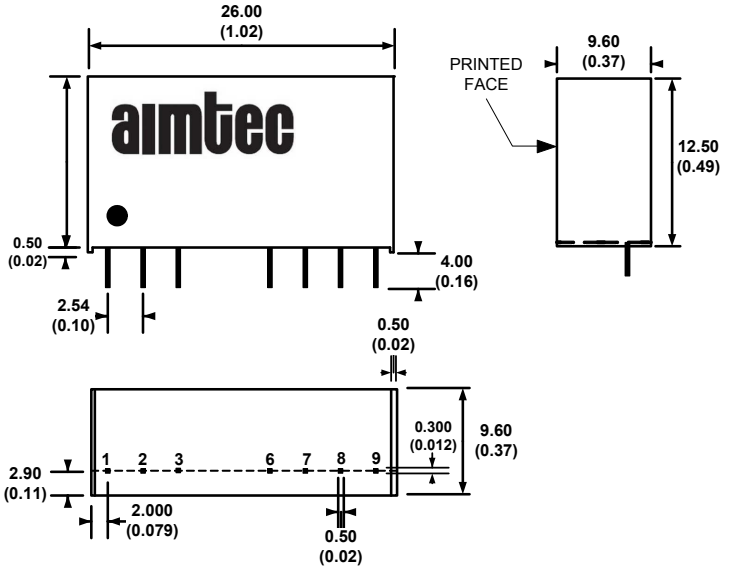
Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load, Vin nominal	>100	550	KHz
Operating temperature	With derating above 71°C	-40 to +85		°C
Storage temperature		-50 to +125		°C
Temperature rise	Full load	15	35	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Non-conductive black plastic (UL94V-0 rated)			
Weight		7		g
Dimensions (L x H x W)		1.02 x 0.37 x 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

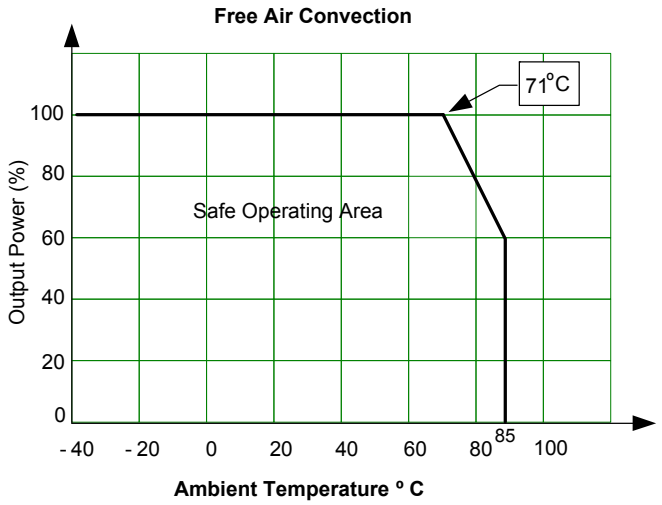
Pin Out Specifications

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

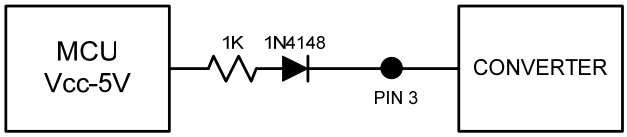
Dimensions



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.