

Not recommended for new design Use AM2GW-Z series

Series AM2GW-NZ

2 Watt | DC-DC Converter

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 78%
- 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
AM2GW-4809S-NZ	18-72	9	222	1500	680	78

Models **Dual output**

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Max Capacitive Load (μF)	Efficiency (%)
AM2GW-4809D-NZ	18-72	±9	±111	1500	±270	77

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
TestedI/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

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General Specifications (continued)

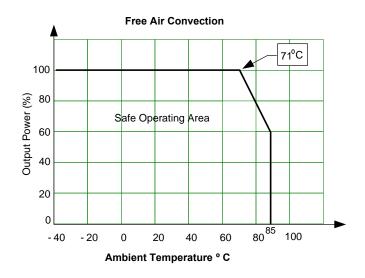
Parameters	Conditions	Typical	Maximum	Units
Temperature rise	Full load	15	35	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Non-conductive black plastic (UL94V-0 rated)			
Weight		7		g
Dimensions (L x H x W)	1.02 x 0.37x 0.49 inch26.00 x 9.60 x 12.00 mm			
MTBF	>1 000 000 hrs (MIL-HDBK -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

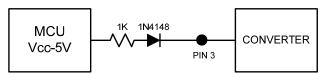
Pin	Single	Dual
1	- V Input	- V Input
2	+ V Input	+ V Input
3	On/Off Control	On/Off Control
6	+ V Output	+ V Output
7	N.C.	Common
8	N.C.	N.C.
9	- V Output	- V Output

Derating



26.00 (1.02) PRINTED PRINTED (0.37) FACE 12.50 (0.49) 2.54 (0.10) 2.54 (0.11) 2.000 (0.11) 2.000 (0.079) 0.50 (0.02) 0.300 (0.012) (0.37) (0.37)

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.

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