

# **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 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

**Input Specifications** 

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

<sup>\*</sup> 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
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 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

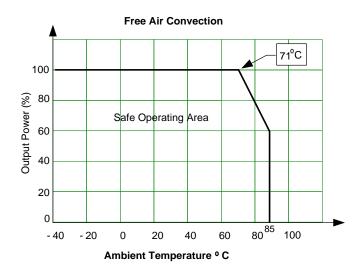


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### **Pin Out Specifications**

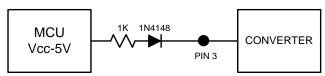
Pin	Single
1	- V Input
2	+ V Input
3	On/Off Control
6	+ V Output
7	N.C.
8	N.C.
9	- V Output

# **Derating**



#### 26.00 (1.02) PRINTED 9.60 (0.37) FACE 12.50 (0.49) 2.54 (0.10) 0.50 (0.02) 0.50 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012) 0.300 (0.012)

### 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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