# MORNSUN®



### FEATURES

- Universal input Voltage : 90 264VAC, 50/60Hz
- DoE Level VI efficiency
- Over voltage, Over current, Short circuit protection
- Fully enclosed plastic case
- 2 pole Britain plug
- Small wall-mounted type

MG005-VA series is a small wall-mounted type adapter. This series features universal input voltage, low power consumption, high efficiency, high reliability, and safer isolation, meets IEC/EN61000-4, CISPR22/EN55032 and BS EN60950. The entire series supplies different models with output voltages range between 3V and 15V that can satisfy the demands for the various types of consumer electronic devices, telecommunication devices, office and civil applications devices.

	Model	MG00503VA	MG00505VA	MG00509VA	MG00512VA	MG00515VA		
Output	DC Voltage	3V	5V	9V	12V	15V		
	Rated current	1.0A	1.0A	0.5A	0.5A	0.4A		
	Current range	0-1.0A	0-1.0A	0-0.5A	0-0.5A	0-0.4A		
	Rated power	3.0W	5.0W	4.5W	6.0W	6.0W		
	Voltage Accuracy	±7%	±5%	±5%	±5%	±5%		
	Line Regulation	±1%	±1%	±1%	±1%	±1%		
	Load Regulation	±5%	±5%	±5%	±5%	±5%		
	Ripple &Noise*	120mVp-p max	120mVp-p max	120mVp-p max	120mVp-p max	150mVp-p max		
	Start-up time	3s@100-240VAC, full load						
	Hold-up time	10ms@115VAC, full load, 20ms@230VAC, full load						
	Rise time	80ms max						
	Overshoot/	±10%						
	Transient response	Output voltage range ±5%, load 25%-50%, 50%-75%, slope: 0.5A/us, frequency: 50Hz-10KHz						
	Input voltage	90 - 264VAC						
	Input frequency	47 - 63Hz						
	Efficiency(Typ.)	64.33%(ERP V)	73.62%	77.05%	78.88%	78.88%		
nput	Input current	0.15A Max@100VAC, full load						
	Inrush current	Cold start: 30A/230VAC						
	No load power	<0.1W						
	Leakage current	0.25mA Max@240VAC						
Protections	Over voltage	Rated output voltage 110%-150%						
	Over current	Rated output current 110%-200%, self-recovery						
		Hiccup, Continuous, self-recovery						

**MORNSUN**<sup>®</sup>

MORNSUN GUANGZHOU SCIENCE & TECHNOLOGY CO., LTD.

2017.12.28-A/1 Page 1 of 4

# 5W AC/DC Adapter

# MG005-VA Series

# MORNSUN®

General Specifica	tions					
ltem	Operating Conditions	Min.	Тур.	Max.	Unit	
Isolation Voltage	Input-output, Test 1 minute, leakage current<5mA	3000			VAC	
Insulation Resistance	Input-output, add 500Vdc test voltage	100			MΩ	
Operating Temperature		-10		40		
Storage Temperature		-25		70	°C	
Operating Humidity				90	0/ DU	
Storage Humidity				95	%RH	
Altitude				2000	m	
Lifetime	25°C	2			years	
MTBF	MIL-HDBK-217F (25°C)	50000			hours	

Physical Specifications				
Casing Material	PC,120°C 94V-0			
Color	Black/White(Other color can be designed by customization)			
Dimension	(L)55.00mm*(W)49.40mm*(H)42.29mm			
Weight	62g(Тур.)			
Cooling Method	Free air convection			

cifications			
RE	EN55032, CLASS B		
CE	EN55032, CLASS B		
ESD(MAX)	IEC/EN61000-4-2 Contact ±8KV/Air ±15KV	perf. Criteria B	
RS	IEC61000-4-3 3V/m	perf. Criteria A	
CS	IEC61000-4-6 3Vrms	perf. Criteria A	
Surge(MAX)	IEC/EN61000-4-5 ±2KV/ ±2KV	perf. Criteria B	
	RE CE ESD(MAX) RS CS	RE EN55032, CLASS B   CE EN55032, CLASS B   ESD(MAX) IEC/EN61000-4-2   Contact ±8KV/Air ±15KV   RS IEC61000-4-3 3V/m   CS IEC61000-4-6 3Vrms	

Note: standard ESD contact ±4KV/Air ±8KV, Surge ±1KV/ ±1KV.

Safety Standards				
Application fields	Standard	Status	Note	
Π	BS EN60950	Approved		
AV	BS EN60065	Meet		
Home appliances	BS EN61558-2-16	Meet		
Lighting	BS EN61347	Meet		

**MORNSUN®** 

MORNSUN GUANGZHOU SCIENCE & TECHNOLOGY CO.,LTD.

2017.12.28-A/1 Page 2 of 4

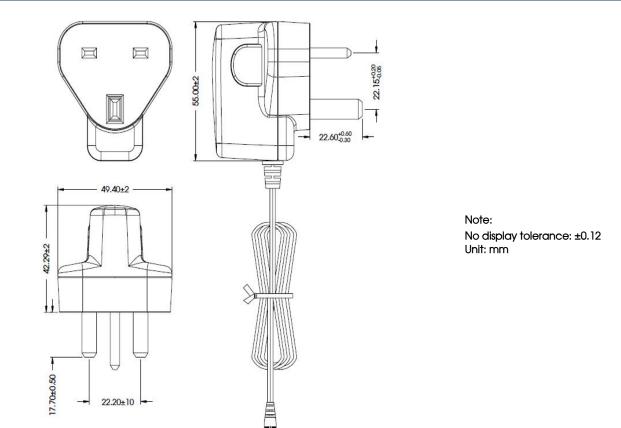
MORNSUN Guangzhou Science & Technology Co., Ltd. reserves the copyright and right of final interpretation

# 5W AC/DC Adapter

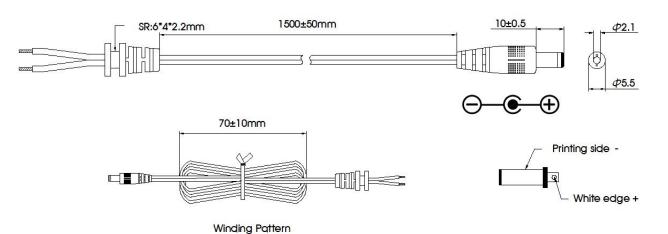
### MG005-VA Series

#### Mechanical Drawing





### DC Wire Drawing



NO. ITEM Q' TY DESCRIPTION Note: 1.Compliance with RoHS 3V UL2468 22AWG/2C 80°C/300V L=1500mm 01 CABLE 1PCS 5V/9V/12V/15V UL2468 24AWG/2C 80°C/300V L=1500mm 2.No display tolerance: ±0.12 02 PLUG 1PCS DC PLUG:5.5\*2.1\*10 3.Unit: mm

## **MORNSUN®**

MORNSUN GUANGZHOU SCIENCE & TECHNOLOGY CO., LTD.

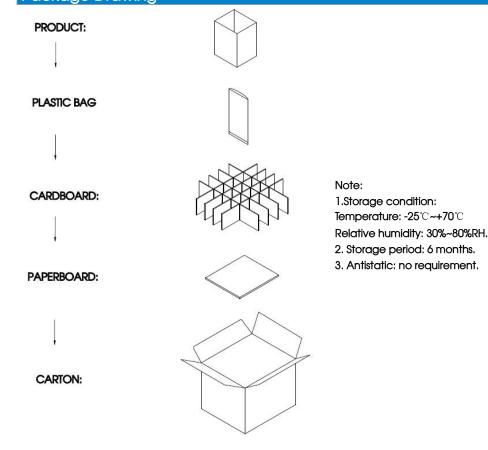
2017.12.28-A/1 Page 3 of 4

# 5W AC/DC Adapter

MG005-VA Series

Package Drawing

# **MORNSUN®**



#### Note:

- 1. Products are related to laws and regulations: see "Features", "EMC" and "Safety standards".
- 2. Our products shall be classified according to ISO14001 and related environmental laws and regulations, and shall be handled by qualified units.
- 3. If the product is not operated within the required load range, the product performance cannot be guaranteed to comply with all parameters in the datasheet;
- 4. Unless otherwise specified, parameters in this datasheet were measured under the conditions of Ta=25 °C, humidity<75% with nominal input voltage and rated output load;
- 5. All index testing methods in this datasheet are based on our Company's corporate standards;
- 6. We can provide product customization service; Please contact our technicians directly for specific information;

## Mornsun Guangzhou Science & Technology Co., Ltd.

Address: No. 5, Kehui St. 1, Kehui Development Center, Science Ave., Guangzhou Science City, Luogang District, Guangzhou, P. R. ChinaTel: 86-20-38601850-8801Fax: 86-20-38601272E-mail: sales@mornsun.cn

**MORNSUN**<sup>®</sup>

MORNSUN GUANGZHOU SCIENCE & TECHNOLOGY CO., LTD.

2017.12.28-A/1 Page 4 of 4