





RoHS

### **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 USA plug
- Small wall-mounted type

MA005-WA 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 UL60950.

Model		MA00505WA	
	DC Voltage	5V	
	Rated Current	1.0A	
	Current Range	0-1.0A	
	Rated Power	5.0W	
	Voltage Accuracy	±5%	
	Line Regulation	±1%	
Output	Load Regulation	±5%	
	Ripple &Noise*	120mVp-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/Undershoot	±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.)	73.62%	
Input	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	
	Short Circuit	Hiccup, continuous, self-recovery	
Note	* Ripple and noise are measured by 20MHz bandwidth; at full load, 100-240VAC input, output terminated with a 0.1uF cerami capacitor and a 10uF electrolytic capacitor.		

General Specifications					
Item	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	-		$\mathbf{M} \Omega$
Operating Temperature		-10	_	40	°C
Storage Temperature		-25		70	
Operating Humidity		-		90	O/ DU I
Storage Humidity				95	%RH



MORNSUN Guangzhou Science & Technology Co., Ltd.

# 5W AC/DC Adapter

## MA005-WA Series



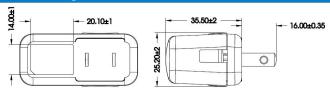
Altitude				2000	m
Lifetime	25℃	2	_		years
MTBF	MIL-HDBK-217F (25°C)	50000			hours

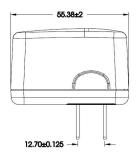
Physical Specifications				
Casing Material	PC, 120°C 94V-0			
Color	Black/White (Other color can be designed by customization)			
Dimension	(L)55.38mm x (W)25.20mm x (H)35.50mm			
Weight	35g (Typ.)			
Cooling Method	Free air convection			

EMC Spe	ecifications		
EMI	RE	EN55032, CLASS B	
	CE	EN55032, CLASS B	
EMS	ESD	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	IEC/EN61000-4-5 ±2KV/ ±2KV	perf. Criteria B
Note: Stand	ard ESD contact ±4K\	//Air ±8KV, surge ±1KV/ ±1KV.	

Safety Standards						
Application Fields	Standard	Status	Note			
IT	UL60950	Approved				
AV	UL60065	Meet				
Home Appliances	ETL1310	Meet				
Lighting	ETL1310	Meet				

## **Mechanical Drawing**





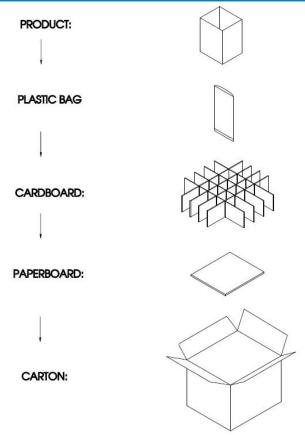
Note:

No display tolerance: ±0.12

Unit: mm

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## **Package Drawing**



#### Note:

1.Storage condition:
Temperature: -25°C to +70°C
Relative humidity: 30% - 80%RH.
2. Storage period: 6 months.
3. Antistatic: no requirement.

### 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 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, Huangpu District, Guangzhou, P. R. China Tel: 86-20-38601850 Fax: 86-20-38601272 E-mail: info@mornsun.cn www.mornsun-power.com

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