







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

MC024-HA 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 GB4943. The entire series supplies different models with output voltages range between 5V and 24V that can satisfy the demands for the various types of consumer electronic devices, telecommunication devices, office and civil applications devices.

Electric S	Specification:	S						
Model		MC02405HA	MC02409HA	MC02412HA	MC02415HA	MC02418HA	MC02424HA	
Output	DC Voltage	5V	9V	12V	15V	18V	24V	
	Rated Current	4.0A	2.5A	2.0A	1.6A	1.33A	1.0A	
	Current Range	0-4.0A	0-2.5A	0-2.0A	0-1.6A	0-1.33A	0-1.0A	
	Rated Power	20W	22.5W	24W	24W	24W	24W	
	Voltage Accuracy	±5%	±5%	±5%	±5%	±5%	±5%	
	Line Regulation	±1%	±1%	±1%	±1%	±1%	±1%	
	Load Regulation	±5%	±5%	±5%	±5%	±5%	±5%	
	Ripple & Noise*	120mVp-p max	120mVp-p max	120mVp-p max	150mVp-p max	180mVp-p max	240mVp-p max	
	Start-up Time	3s@100-240VAC, full load						
	Hold-up Time	10ms@115VAC, full load, 20ms@230VAC, full load						
	Rise Time	30ms 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.)	83.08%	85.96%	86.20%	86.20%	86.20%	86.20%	
	Input Current	0.6A Max@100VAC, full load						
Input	Inrush Current	Cold start: 40A/115VAC, 80A/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 ceramic capacitor and a 10uF electrolytic capacitor.							

# 24W AC/DC Adapter

## MC024-HA Series



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			<b>M</b> Ω	
Operating Temperature		-10		40	°C	
Storage Temperature		-25		70		
Operating Humidity				90	0/ DL I	
Storage Humidity				95	%RH	
Altitude				5000	m	
Lifetime	<b>25</b> ℃	2			years	
MTBF	MIL-HDBK-217F (25°C)	50000			hours	

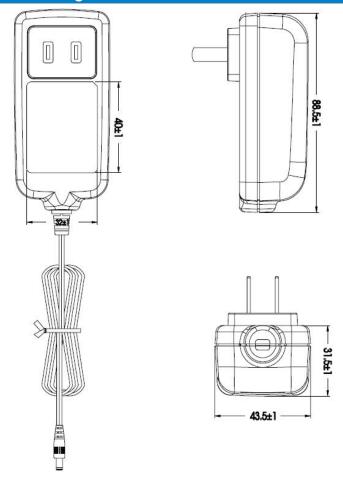
Physical Specifications			
Casing Material	PC,120℃ 94V-0		
Color	Black/White(Other color can be designed by customization)		
Dimension	(L) 88.50mm x (W) 43.50mm x (H) 31.50mm		
Weight	115g (Typ.)		
Cooling Method	Free air convection		

EMC Specifications				
ЕМІ	RE	EN55032, CLASS B		
	CE	EN55032, CLASS B		
EMS	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 ±6KV/ ±6KV	perf. Criteria B	
Note:Standard ESD c	ontact ±4KV/Air ±8KV,surge ±1KV/ ±	:1KV.		

Safety Standards			
Application Fields	Standard	Status	Note
IT	GB4943	Approved	
AV	GB8898	Meet	
Home Appliances	GB4706	Meet	

# **MORNSUN®**

## **Mechanical Drawing**

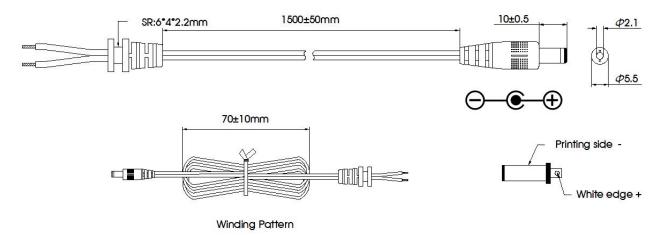


Remark:

No display tolerance: ±0.12

Unit: mm

## DC Wire Drawing



NO.	ITEM	Q'TY	DESCRIPTION
			5V/9V UL2468 18AWG/2C 80°C/300V L=1500mm
01	CABLE	1PCS	12V/15V UL2468 20AWG/2C 80°C/300V L=1500mm
			18V/24V UL2468 22AWG/2C 80°C/300V L=1500mm
02	PLUG	1PCS	DC PLUG:5.5*2.1*10

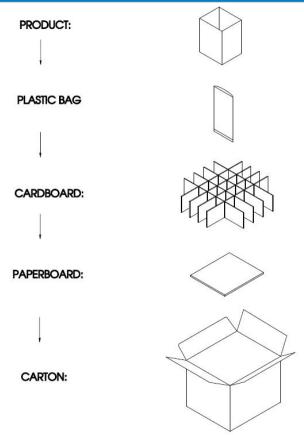
#### Note:

1.Compliance with RoHS2.No display tolerance: ±0.12

3.Unit: mm



### 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;
- 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;</li>
- 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;

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