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 USA plug
- Small wall-mounted type

MA018-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 UL60950. The entire series supplies different models with output voltages range between 3V and 24V that can satisfy the demands for the various types of consumer electronic devices, telecommunication devices, office and civil applications devices.

RoHS

	pecification	MA01805HA	MA01809HA	MA01812HA	MA01815HA	MA01818HA	MA01824HA	
	DC Voltage	5V	9V	12V	15V	18V	24V	
	Rated Current	3.0A	2.0A	1.5A	1.2A	1.0A	0.75A	
Output		0-3.0A	0-2.0A	0-1.5A	0-1.2A	0-1.0A	0-0.75A	
	Current Range	15W	18W	18W	18W	18W	18W	
	Rated Power 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 \pm 5%, load 25%-50%, 50%-75%, slope: 0.5A/us, frequency: 50Hz-10KHz						
	Input Voltage	90-264VAC						
	Input Frequency	47-63Hz						
	Efficiency (Typ.)	81.39%	85%	85%	85%	85%	85%	
nput	Input Current	0.5A Max@100VAC, full load						
•	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		and noise are measured by 20MHz bandwidth; at full load, 100-240VAC input, output terminated with a 0.1uF ceram r and a 10uF electrolytic capacitor.						

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18W AC/DC Adapter

MA018-HASeries

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General Specifica	tions				
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			MΩ
Operating Temperature		-10		40	*
Storage Temperature		-25		70	°C
Operating Humidity				90	01 DU
Storage Humidity				95	%RH
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) 74.70mm x (W) 42.00mm x (H) 31.00mm			
Weight	96g (Тур.)			
Cooling Method	Free air convection			

EMC Specifications				
EMI	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 contact ± 4 KV/Air ± 8 KV, surge ± 1 KV/ ± 1 KV.

Safety Standards					
Application Fields	Standard	Status Note			
П	UL60950	Approved			
AV	ETL1310	Meet			
Lighting	ETL1310	Meet			



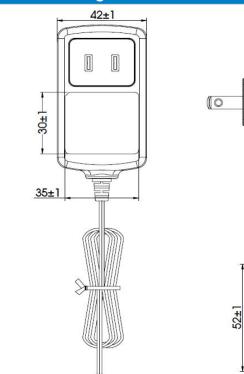
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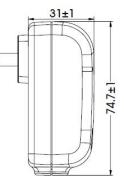
2019.11.27-A/2 Page 2 of 4

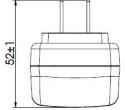
18W AC/DC Adapter MA018-HASeries

Mechanical Drawing



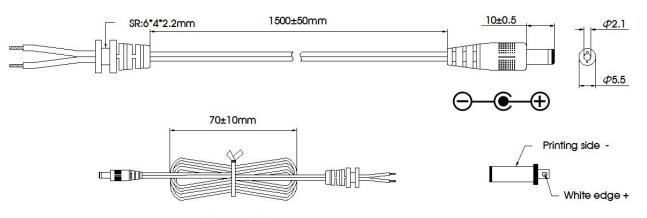






Remark: No display tolerance: ±0.12 Unit: mm

DC Wire Drawing



Winding Pattern

3V/5V UL2468 18AWG/2C 80°C/300V L=1500mm

12V/15V UL2468 22AWG/2C 80°C/300V L=1500mm

18V/24V UL2468 24AWG/2C 80°C/300V L=1500mm

9V UL2468 20AWG/2C 80°C/300V L=1500mm

DESCRIPTION

DC PLUG:5.5*2.1*10

Note: 1.Compliance with RoHS 2.No display tolerance: ±0.12 3.Unit: mm



ITEM

CABLE

PLUG

Q' TY

1PCS

1PCS

NO.

01

02

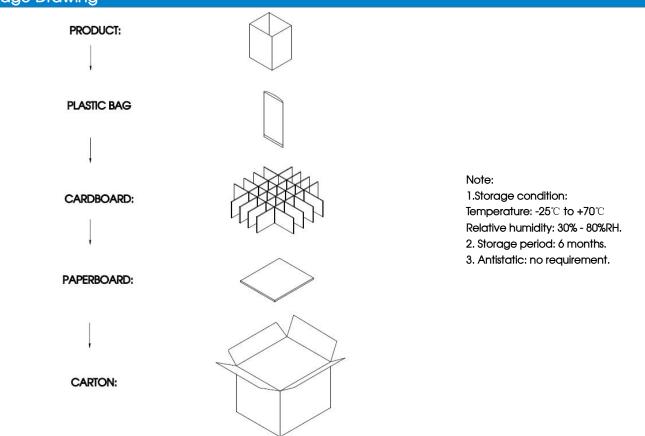
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18W AC/DC Adapter

MA018-HASeries

Package Drawing





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;

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2019.11.27-A/2 Page 4 of 4