5W AC/DC Adapter

MI005-VA Series

MORNSUN®



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 Australia plug
- Small wall-mounted type

MI005-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 AS/NZS60950. The entire series supplies different models with output voltages range between 5V and 15V that can satisfy the demands for the various types of consumer electronic devices, telecommunication devices, office and civil applications devices.

Electric Specifications

Model		MI00505VA	MI00509VA	MI00512VA	MI00515VA
Output	DC Voltage	5V	9V	12V	15V
	Rated current	1.0A	0.5A	0.5A	0.4A
	Current range	0-1.0A	0-0.5A	0-0.5A	0-0.4A
	Rated power	5.0W	4.5W	6.0W	6.0W
	Voltage Accuracy	±5%	±5%	±5%	±5%
	Line Regulation	±1%	±1%	±1%	±1%
	Load Regulation	±5%	±5%	±5%	±5%
	Ripple &Noise*	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/ Undershoot	±10%			
	Transient response	Output voltage range ±5%, load 25%-50%, 50%-75%, slope: 0.5A/us, frequency: 50Hz-10KHz			
Input	Input voltage	90 - 264VAC			
	Input frequency	47 - 63Hz			
	Efficiency(Typ.)	73.62%	77.05%	78.88%	78.88%
	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 ceramic capacitor and a 10uF electrolytic capacitor.				

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General Specifications

Item	Operating Conditions	Min.	Typ.	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	°C
Storage Temperature		-25	--	70	
Operating Humidity		--	--	90	%RH
Storage Humidity		--	--	95	
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)55.40mm*(W)40.16mm*(H)44.57mm
Weight	58g(Typ.)
Cooling Method	Free air convection

EMC Specifications

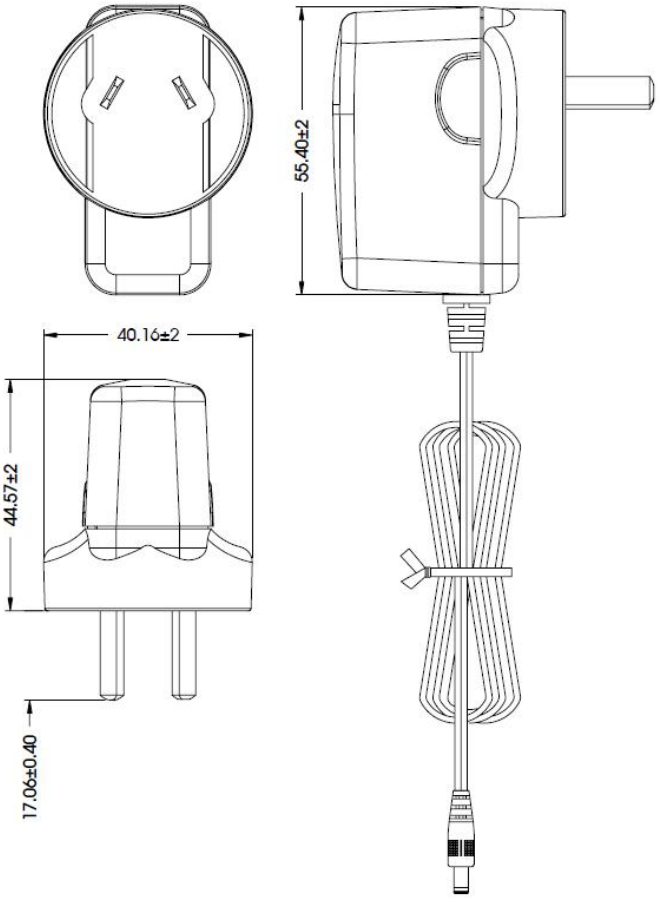
EMI	RE	EN55032, CLASS B	
	CE	EN55032, CLASS B	
EMS	ESD(MAX)	IEC/EN61000-4-2 Contact ±8KV/Air ±15KV	perf. Criteria B
	RS	IEC61000-4-3 3V/m	perf. Criteria A
	CS	IEC61000-4-6 3Vrms	perf. Criteria A
	Surge(MAX)	IEC/EN61000-4-5 ±2KV/ ±2KV	perf. Criteria B
Note: standard ESD contact ±4KV/Air ±8KV, Surge ±1KV/ ±1KV.			

Safety Standards

Application fields	Standard	Status	Note
IT	AS/NZS60950	Approved	
AV	AS/NZS60065	Meet	
Home appliances	AS/NZS61558-2-16	Meet	

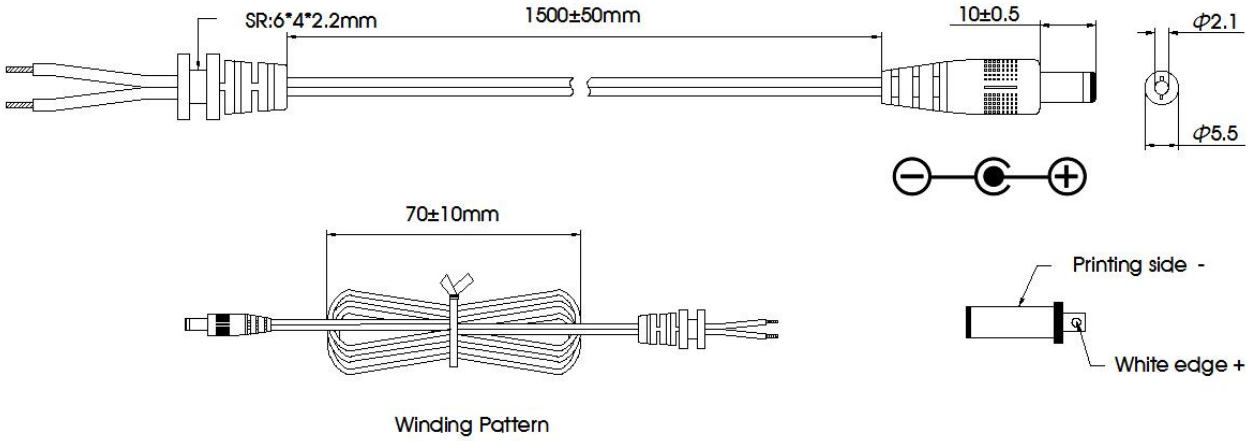
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Mechanical Drawing



Note:
No display tolerance: ±0.12
Unit: mm

DC Wire Drawing



Winding Pattern

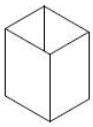
NO.	ITEM	Q' TY	DESCRIPTION
01	CABLE	1PCS	5V/9V/12V/15V UL2468 24AWG/2C 80℃/300V L=1500mm
02	PLUG	1PCS	DC PLUG:5.5*2.1*10

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

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Package Drawing

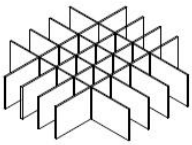
PRODUCT:



PLASTIC BAG



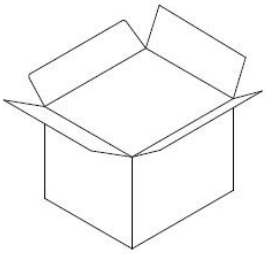
CARDBOARD:



PAPERBOARD:



CARTON:



Note:
1.Storage condition:
Temperature: -25℃~+70℃
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 ℃, 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;

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