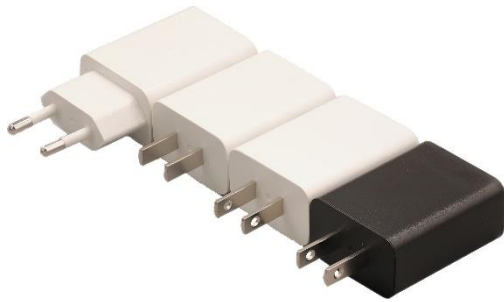


MEDICAL GRADE ADPATER



MIA-11

Universal USB Charger for medical devices



Highlights:

- For IT and Medical Application
- Wall mount
- 5V 2.1A
- US, Japan, China, Australia, UK and Europe plugs
- 75mW low standby
- DOE Level VI
- Universal 90VAC~264VAC input
- Light Weight
- >200kHour MTBF
- 2MOPP Isolation
- 5000 meters operation



RoHS



2MOPP



5000M Altitude OP



LEVEL VI EFFICIENCY

Key Specification

Model	MIA-11CA	MIA-11UA	MIA-11EA	MIA-11AA	MIA-11KA
Input Type	China Class II	US Class II	Europe Class II	Australia Class II	UK Class II
Output Voltage	5V				
Rated Output Current	2.1A				
Rated Output Power	10.5W				
Warranty	3 Years				
Dimension	48mm x 38mm x 22mm		Refer to drawing		
EMC	IEC60601-1-2 4 th Edition				
Safety Standard (Compliance Only)	IEC60601-1 3 rd +A1 Edition CB Report, GB4943.1-2011				

Model Name

MIA - 11 C □

Series Name

Rated Power

Inlet Region

Control Code

C: China
U: US
E: Europe
A: Australia
K: UK

A: Standard Model

SPECIFICATIONS

All specifications are for rated input/output and 25°C unless otherwise specified

INPUT CHARACTERISTICS

Function	Minimum	Typical	Maximum	Condition
Rated Input Voltage	100 VAC		240 VAC	
Input Voltage Range	90 VAC		264 VAC	
Input Current			0.4 A	
Average Efficiency	80%			Per DOE Test Requirement
Inrush Current			40 A	240VAC Input, Cold Start

OUTPUT CHARACTERISTICS

Function	Minimum	Typical	Maximum	Condition
Output Voltage Total Regulation			±4%	Including initial tolerance, line regulation and load regulation
Output Ripple & Noise			100mV	Peak to peak value
Turn on delay Time			2 s	
Rise Time			100 ms	
Holdup Time	8 ms			100VAC 60Hz Input

PROTECTION CHARACTERISTICS

Function	Minimum	Typical	Maximum	Condition
Over Current Protection (OCP)			130% Rated Current	Auto-restart after fault condition is removed
Short Circuit Protection (SCP)				Auto-restart after fault condition is removed
Over Voltage Protection (OVP)				Latch off
Over Temperature Protection (OTP)				Auto-restart after fault condition is removed

ENVIRONMENTAL

Function	Minimum	Typical	Maximum	Condition
No Load Power Consumption			75 mW	115VAC/60Hz and 230VAC/50Hz Input
Operation Ambient Temperature	-10 °C		40 °C	
Cooling				Convection Cooled
Operation Humidity	5% RH		95% RH	Non-condensing
Storage Ambient Temperature	-40 °C		85 °C	
Storage Humidity	5% RH		95% RH	Non-condensing
Operating Altitude			5000 m	Or 16,400 feet
Shock (Non-Operation)			50 g	11ms, 3 shocks for each direction
Vibration (Operation)			2 g _{RMS}	5-500Hz, 15 Minutes for each three axis
Weight			50 gram	

RELIABILITY

Function	Minimum	Typical	Maximum	Condition
MTBF	200 kHours			According to MIL-HDBK-217F. 25°C
Life	3 Years			Rated input and output condition

EMC

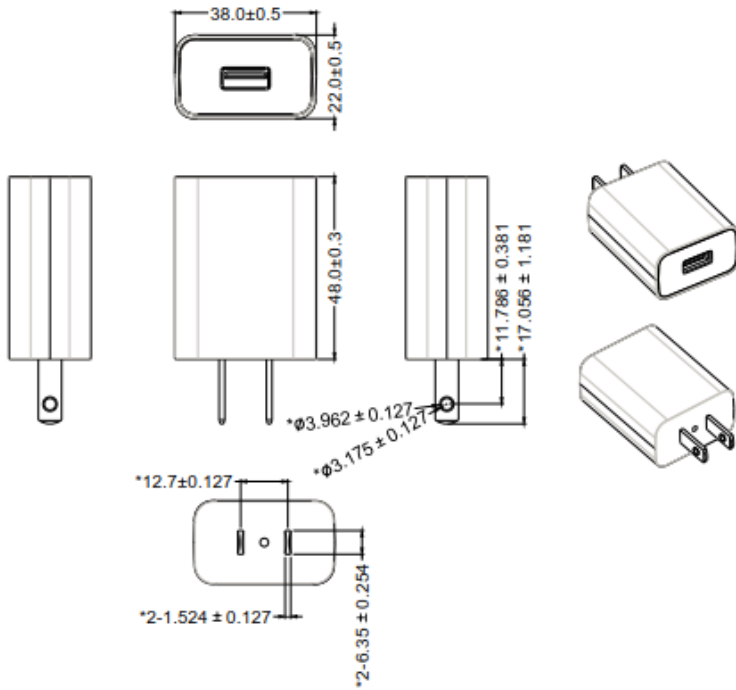
Item	Description
Conducted Emissions	EN55011/EN55022, FCC TITLE 47: Class B
Radiated Emissions	EN55011/EN55022, FCC TITLE 47: Class B
Harmonic Current Emissions	IEC61000-3-2, Class D
Voltage Flicker	IEC61000-3-3
Electrostatic Discharge	IEC61000-4-2, Level 4, Criteria A. Air Discharge 15kV, Contact Discharge 8kV
Surge	IEC61000-4-5, Level 3 Criteria A. Common mode 2kV, Differential Mode 1kV
Conducted Immunity	IEC61000-4-6, Level 2 Criteria A. 150kHz-80MHz, 3Vrms, 6Vrms at ISM Band and Amateur radio bands
Power Frequency Magnetic Fields	IEC61000-4-8, Criteria A. 30A/m
Voltage Dips	IEC61000-4-11 Criteria A: 30% 10ms, Criteria B: 60% 100ms, 100% 5000ms
	IEC60601-1-2 Criteria A: 100% 10ms at step 45° (load derating required for 100VAC) Criteria B: 30% 500ms, 100% 20ms, 100% 5000ms

SAFETY & DIRECTIVES

Item	Description
Safety Standards (Compliance Only)	IEC62368-1, TUV62368-1, CSA/UL62368-1 GB4943.1-2011, GB9254-2008, GB17625.1-2003 IEC60601-1 3 rd edition+A1
Directives	MDD Directive 93/42/EEC RoHS Directive 2011/65/EU Compliant
Dielectric Voltage	Primary to Secondary (2XMOPP): 4kVAC
Touch Current @264VAC, 60Hz	<100uA @ Normal Condition <300uA @ Single Fault Condition

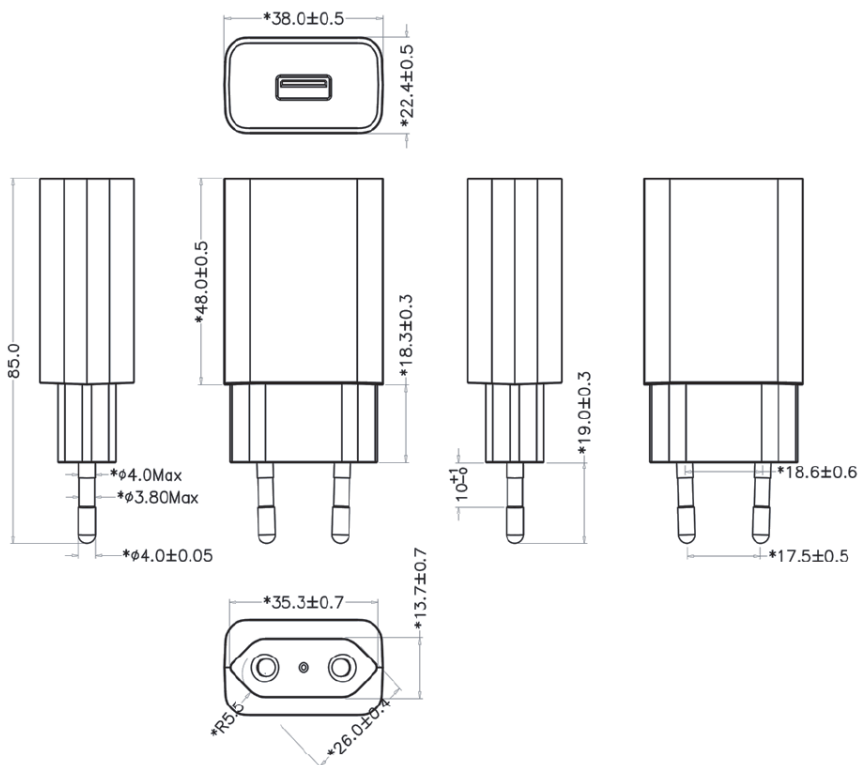
MECHANICAL DETAIL

MIA-11UA&MIA-11CA All dimensions in mm

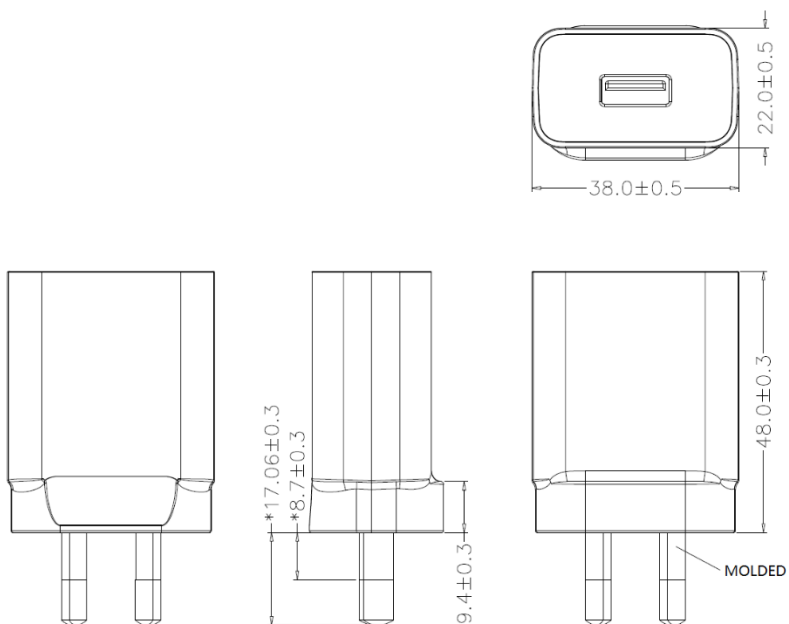


HOLES ON CONTACTS FOR MIA-11UA ONLY

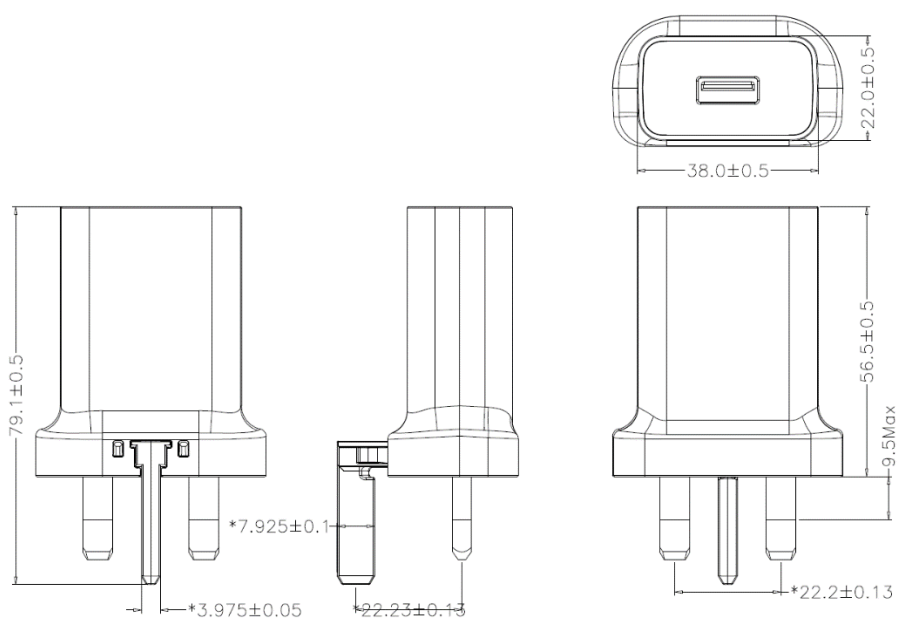
MIA-11EA



MIA-11AA



MIA-11KA



CONTACTS & OTHER INFORMATION

For more information, please visit www.appliedpsu.com

For sales inquiries, please send an email to sales@appliedpsu.com

User manual and other document available at www.appliedpsu.com/support