

## SPECIFICATION FOR REFERENCE

CUSTOMER : \_\_\_\_\_

CUSTOMER P.N. : \_\_\_\_\_

MODEL NO. : \_\_\_\_\_ **MS-Z1520R250-038A0-P** \_\_\_\_\_

PRODUCT NO. : \_\_\_\_\_ **SCXXX-P0/XXXXXX** \_\_\_\_\_

SAMPLE DATE : \_\_\_\_\_ **2023-08-21** \_\_\_\_\_

CUSTOMER AUTHORIZED SIGNATURE		

Please return to us one copy of "SPECIFICATION FOR APPROVAL"  
with you approved signature.

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### 3.4.Hold-up Time

10mS min. @ Full load &115Vac/60Hz input turn off at worst case.

20mS min. @ Full load &230Vac/50Hz input turn off at worst case.

### 3.5. Rise Time

20mS max. @ Rated load

### 3.6. Fall Time

20mS max. @ Full load

### 3.7.Output Overshoot / Undershoot

10% max. When the power on or off

### 3.8.Output Load Transient Response

Output voltage within 22.5-27.5V for load step from 20% to 80%, R/S: 0.5A/uS,  
frequency: 100Hz duration and 8mS at 80%.

## 4. Protection Requirements

### 4.1.Over Current Protection

Over Current Point Limited:  $3.2A < I < 4.8A$  (100Vac-240Vac)

The output shall hiccup when the over currents applied to the output rail, and shall be self-recovery when the fault condition is removed

### 4.2.Short Circuit Protection

The input power shall decrease when the output rail short, the power supply shall no damage, and shall be self-recovery when the fault condition is removed

## 5. Environment Requirements

### 5.1.Operating Temperature and Relative Humidity

0°C to +40°C

20%RH to 85%RH

### 5.2.Storage Temperature and Relative Humidity

-20°C to +70°C

5%RH to 95%RH non-condensing @ Sea level shall be low 5000 meters.

### 5.3.Vibration

10 to 300Hz sweep at a constant acceleration of 1.0G(Breadth: 3.5mm) for 1Hour for each of the perpendicular axes X, Y, Z

### 5.4.Drop in

Height: 1m; the product should be fell off on the hardwood with the thickness of 20mm. Apply one time on all surfaces, totally 6 surfaces. The electric performance and Hi-Pot test must be OK after the drop tests.

## 6. Reliability Requirements

### 6.1.Burn-in

The power supply shall be burn-in for 4 Hours under normal input and 80% rated load at  $40^{\circ}C \pm 5^{\circ}C$

## 6.2.MTBF Qualification

The MTBF shall be at least 100,000hours at 25°C, 80% max load and nominal input condition

## 7. EMI/EMS Standards

### 7.1. EMI Standards

FCC Part 15 Subpart B  
GB13837/GB17625.1 EN55032 EN55035

### 7.2. EMS Standards

7-2-1 EN 61000-4-2,electrostatic discharge(ESD) requirement

Discharge characteristic	Test level	Test criteria
Air discharge	+/-15KV	B
Contact discharge	+/-8KV	B

7-2-2 EN 61000-4-3,radiated electromagnetic field susceptibility(rs)

Test level	Test criteria
3V/m (r.m.s)	A
80-1000MHz,80%AM(1KHz) sine-wave	

7-2-3 EN 61000-4-4,electric fast transients(burst) immunity requirement

Coupling	Test level	Test criteria
AC-input	1KV	A
AC-input	2KV	B

7-2-4 EN 61000-4-5,surge capability requirement

Surge voltage	Test criteria
Common mode +/-2KV	A
Differential mode +/-1KV	

7-2-5 EN 61000-4-6, Induced radio frequency fields conducted disturbances immunity requirement

Test level	Test criteria
3V	A
0.15-80 MHz,80%AM(1KHz)	

7-2-6 Assessment criteria

Acceptance criteria	Performance
A	Agreed operational behavior within the specified limits
B	Time limited functional diminishment or malfunction during the tests is permitted . The function is self-reactivated by the unit following completion of the tests .
C	Malfunction is permitted .The function can be reactivated either by reconnection to the mains or by operator intervention .

**8. Safety Standards**

**8.1.Dielectric Strength(Hi-pot)**

Primary to Secondary: 3000Vac /10mA max. / 60S (when safety testing).

Primary to Secondary: 3300Vac /5mA max. / 3S (when production).

**8.2.Leakage Current**

0.25mAmax. at 264Vac / 60Hz

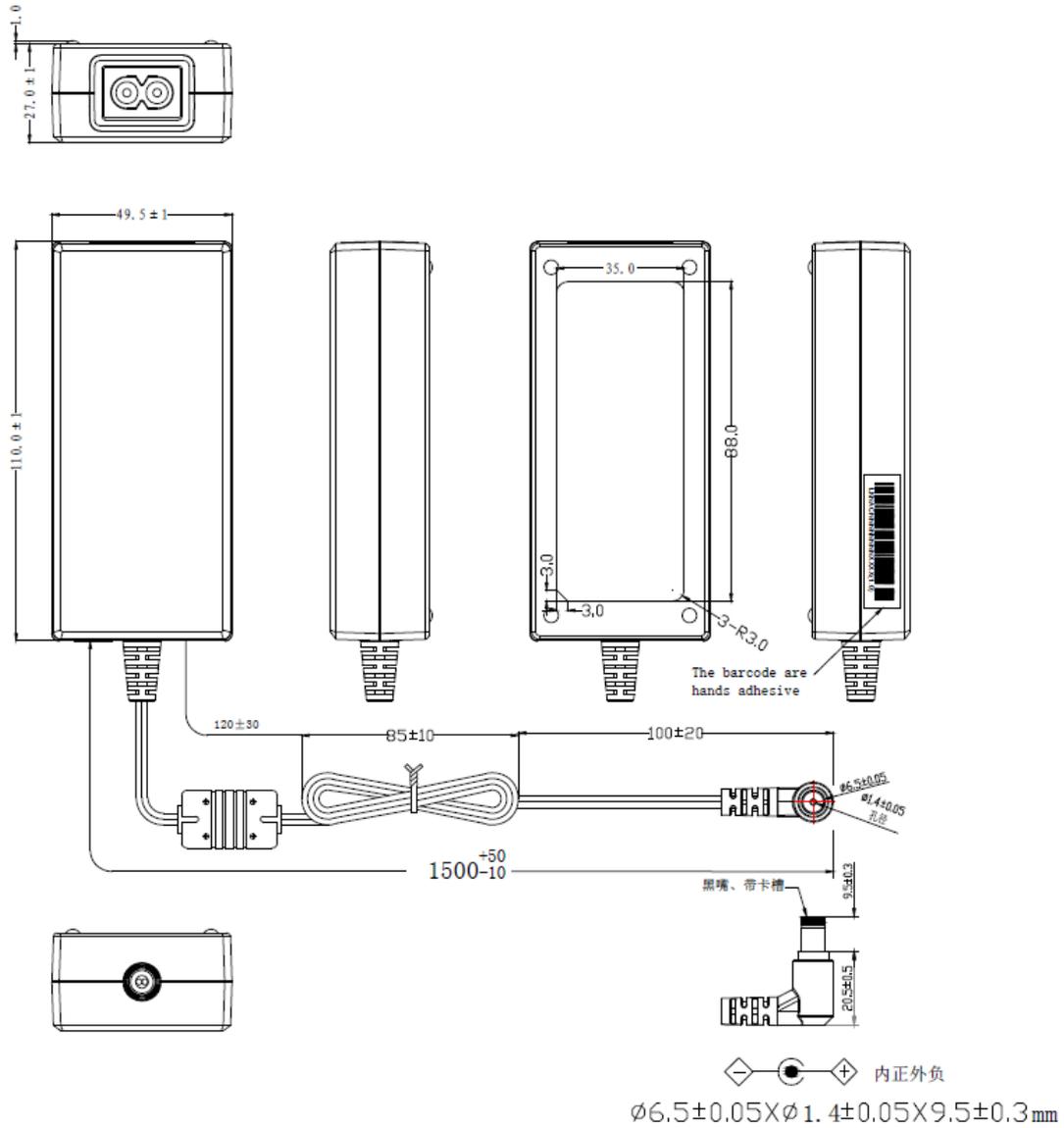
**8.3.Insulation Resistance**

100MΩ min. at primary to secondary add 500Vdc test voltage

**8.4.Regulatory Standards**

Type	Country	Standard	State	
UL	USA	UL62368-1	APPROVAL	
CCC	CHINA	GB8898	APPROVAL	
CE	Europe	EN62368-1	APPROVAL	
UKCA	UK	EN62368-1	APPROVAL	

### 9. Mach. Outline Drawing



Unit: mm  
Other tolerance: ±0.5

Case material: ■ PC temperature resistance: 125°C

□ PC+ABS temperature resistance: 95°C

Remark: PC material compliances with ball pressure testing requirement.