



RoHS

## Key features

- Universal input :85—264Vac 50/60 Hz
- Low ripple and noise
- Output overload protection ,short circuit protection
- High efficiency, high density
- Isolating voltage 4kv
- leakage current(<0.1mA)
- Medical level safety certification (Class 2 MOPP patients protection measure)
- Lower power, RoHS , no-load loss is less than 0.1W
- 100% test and work
- 3 years product warranty
- Pass CB certification

MP25 series --- a medical class small size modular switching power supply offered by Zhongyiguang. The output power of this series module power supply is 25 W, with extremely low no-load loss ( < 0.1W), low c,which is only 0.1mA, small size (70\*48\*23.5mm) and isolated pressure up to 4kv,etc. The product' s safety specifications meet the UL60601、 EN60601 and other related standards. This series of products are widely used in medical devices and other related equipment, and it also be used in industry, instrumentation, electricity and other industries. Such as applied to a relatively harsh environment electromagnetic compatibility must refer to the application circuit.

## Electrical specifications

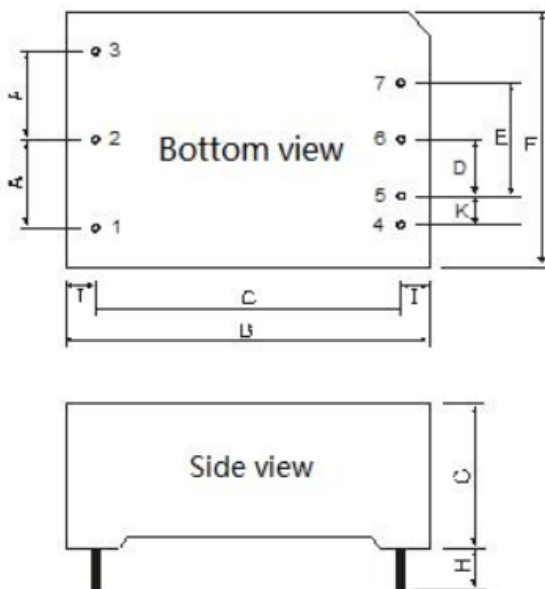
Model	Input voltage	Output Power(W)	Output voltage(V)	Output current(A)	Ripple(mv)	Efficiency (%)
MP25-S05	85 ~ 264VAC	25	5	5	50	77
MP25-S12	85 ~ 264VAC	25	12	2.1	50	83
MP25-S15	85 ~ 264VAC	25	15	1.66	50	84
MP25-S24	85 ~ 264VAC	26.4	24	1.1	50	86
MP25-S48	85 ~ 264VAC	25	48	0.52	50	88

## 一般特性

Output	Output voltage accuracy	±2.0%
	Source effect	±1.0%
	Load effect	±1.0%
	Starting time (TYP)	40ms/230VAC      100ms/115VAC at full load
	Output hold time (TYP)	40ms/230VAC      15ms/115VAC at full load
Input	Input voltage range	85 ~ 264VAC      70 ~ 370VDC
	Input frequency range	47 ~ 440Hz
	Input current (TYP)	450mA / 115VAC      280m A / 230VAC
	Inrush current (TYP)	Inrush current 20 A / 115 VAC      40 A / 230 VAC
	Recommended values for External Fuses	T2A / 250Vac      (Slow break)
	Leakage current (TYP)	< 0.1mA at 230VAC/50Hz
Protection	Output overload and short circuit protection, automatic recovery after troubleshooting	

Work environment	Operating Temperature	-40 ~ +70 °C ( ≥40°C, According to 0.3W/°C derating)
	Humidity	85% .RH max
	Storage Temperature	-40 ~ +85, 10 ~ 95% RH
	Temperature coefficient	0.03%/ (0~ 50°C)
	Vibration coefficient	10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes
Safety and EMC (Note:3)	Safety Standard	EN60601,UL60601
	I/O-Isolation voltage	I/P-O/P:4.0KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC
	Isolation resistance	I/P-O/P,I/P-FG,O/P-FG:>100M Ohms/500VDC 25°C 70% RH
	EMI / RFI conducted	EN55011, EN55022 (CISPR22)
	ESD	IEC/EN 61000-4-2 level 4 8kV/15kV Note: See the application circuit for details
	RF	IEC/EN 61000-4-3 Note: See the application circuit for details
	EFT	IEC/EN 61000-4-4 level 4 4kV Note: See the application circuit for details
Others	SURGE	IEC/EN 61000-4-5 level 4 2kV/4kV Note: See the application circuit for details
	MTBF	200K hrs min. MIL-HDBK-217F @ 25°C
	Dimension	70*48*23.5mm (L*W*H)
	Weight	120g/PCS 14.3kg/Per box
	Package	112PCS/Per box
Notes	size of packing box	360*300*250mm
	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature	
	2. Ripple & noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor	
	3. The power supply is considered a component which will be installed into a final equipment.The final equipment must be re-confirmed that it still meets EMC directives	

## Dimension



European Projection Diagram

	Shell size	Pin	Pin function
A	20.0	1	FG
B	70.0	2	AC(N)
C	62.0	3	AC(L)
D	11.5		
E	23.0	4	No Pin
F	48.0	5	-Vo
G	23.5	6	No Pin
I	≥4.0	7	+Vo
K	5.75		

Remark:

Dimensional unit:mm

Size of terminal section:1.00mm

Length of terminal:≥4.00mm

Terminal tolerance : ±0.1mm

Unmarked tolerance : ±0.5mm

Module weight : 120g ( TPY )

## Typical application diagram