

AC/DC converter



Micro SMPS

www.easypower.in

AC/ DC converter

Features



- Input Supply : 180- 260 VAC
- Operating Temperature Range : 0°C - +50°C
- High isolation voltage up to 1kV
- Regulated output, low ripple and noise
- High efficiency, high reliability
- Plastic case

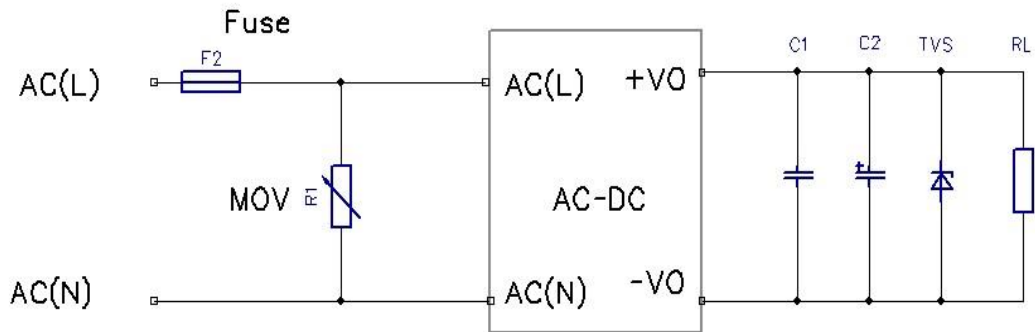
SO5V500 Micro SMPS – a compact size power converter offered by *EASY POWER*. It features universal input voltage, taking AC/DC voltage, low power consumption, high reliability, and safer isolation.

Input Specification					
Item	Operating condition	Min.	Typ.	Max.	Unit
Input Voltage Range	AC input	180		260	VAC
Input Voltage Range	DC input	270		300	VDC
Input frequency		50		50	Hz
Leakage current		0.1 mA RMS typ. 230 VAC/50 Hz			
Recommended external input fuse		1A/ 250V, slow fusing, necessary.			

Output Specification					
Item	Operating conditions	Min.	Typ.	Max	Unit
Output voltage accuracy	5V output	-	±0.2	-	%
Line regulation	Full load	-	±0.5	-	
Load regulation	0% - 100% load	-	±0.5	-	
Ripple & Noise	20 MHz bandwidth (Pk – Pk) value	-	50	100	mV
Output Current		-	450	500	mA
Temperature drift coefficient		-	±0.02	-	%/°C
Min Load		0	-	0	%
Isolation voltage – Input voltage	Test time: 1min	1000	-	-	VAC
Operating Temperature		0	-	+50	°C
Storage Temperature		0	-	+60	°C
Storage Humidity		-	-	90	%RH
Welding Temperature	Wave soldering	260 ± 5°C; time 5 – 10s			
	Manual welding	360 ± 10 °C; time 3 – 5s			
Switching frequency		-	100	-	kHz

Physical Specification	
Casing Material	Black colour, heat resistant
Packaging Dimension	37.00 x 24.00 x 21.mm
Weight	30 gm (Typ.)
Cooling method	Free air convection

Design reference



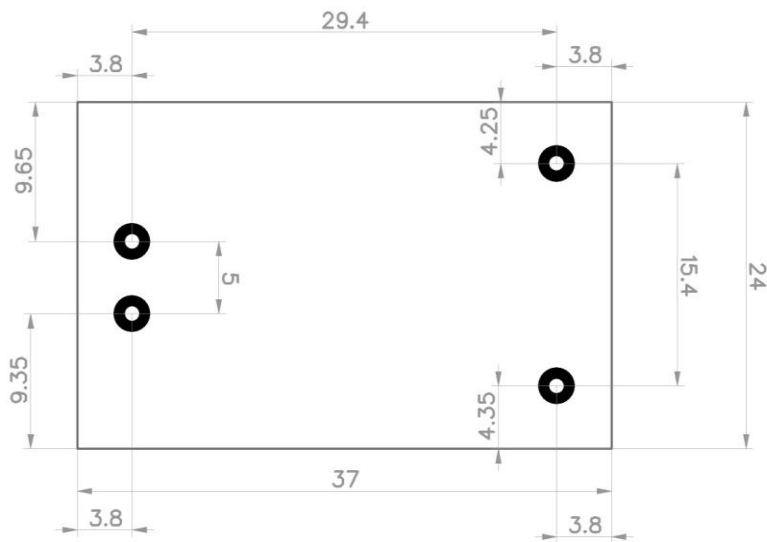
Typical Application Circuit

Model	C1(uF)	C2(uF)	Fuse	MOV	TVS tube
SO5V500	1	150	1A/250, slow fusing necessary	S14K350	

Note:

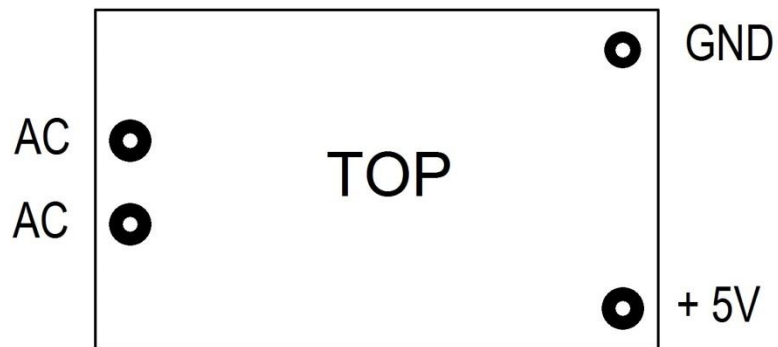
Output filtering capacitor is electrolytic capacitor: it recommended applying electrolytic capacitor with high frequency and low resistance.

Footprint:



S05V500
S05V1000
S012V300
S03V31000
S09V500
S024V120
S015V200
S03V3500

All Dimensions are in MM



Product height is of 21 mm.

Product width is of 24 mm.

Product length is of 37 mm.