

AC/DC converter



Micro SMPS

www.easypower.in

AC/ DC converter

Features



- **Universal Input : 110- 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**

SO5V1000 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.

Continuous output current can be 800 mA, however it can supply up to 1A for a short duration (10 minutes).

Input Specification					
Item	Operating condition	Min.	Typ.	Max.	Unit
Input Voltage Range	AC input	110		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	-	200	600	mV
Output current		-	800	1000	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

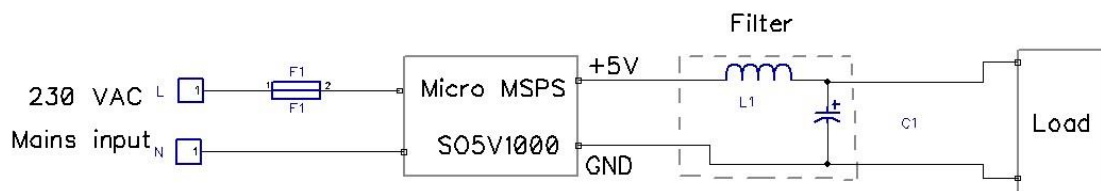
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Physical Specification	
Casing Material	Black colour, heat resistant
Packaging Dimension	37.00 x 24.00 x 21.00
Weight	22 gm (Typ.)
Cooling method	Free air convection

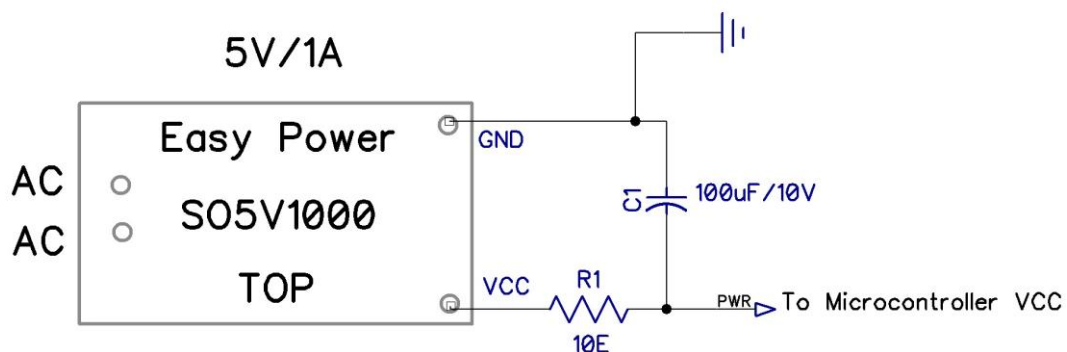
Design reference

Typical Application



Apply filter to get ripple free output

Reduce output ripple of SMPS use this circuit



Model	L1(uH)	C1(uF)	F1
S05V1000	47/3A	220/16V	1A/250, slow fusing necessary

Note:

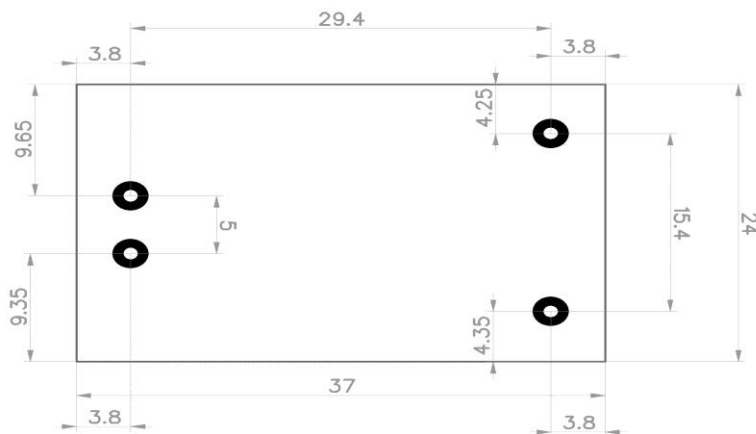
Output filtering capacitor is electrolytic capacitor: it recommended applying electrolytic capacitor with high frequency and low resistance.

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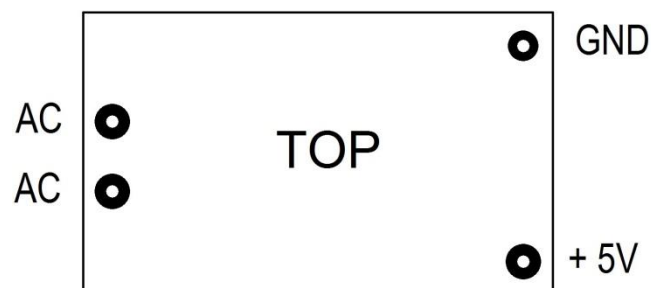
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Footprint:



- 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