

# 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**

SO12V300 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	110		260	VAC
Input Voltage Range	DC input	150		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	12V output	-	±0.2	-	%
Line regulation	Full load	-	±0.5	-	
Load regulation	0% - 100% load	-	±1	-	
Ripple & Noise	20 MHz bandwidth (Pk – Pk) value	-	200	800	mV
Output current		-	300	350	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

# AC/DC converter

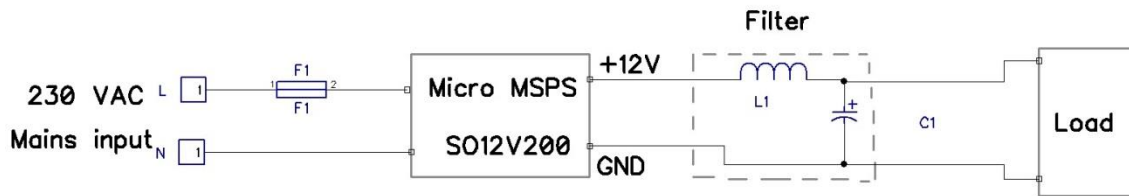


## Micro SMPS

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

Model	L1(uH)	C1(uF)	F1
SO12V300	47/3A	220/25V	1A/250, slow fusing necessary

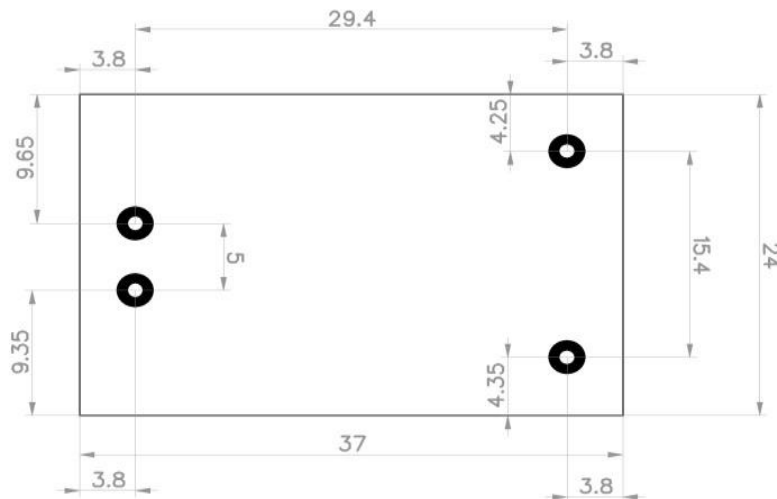
Note:

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

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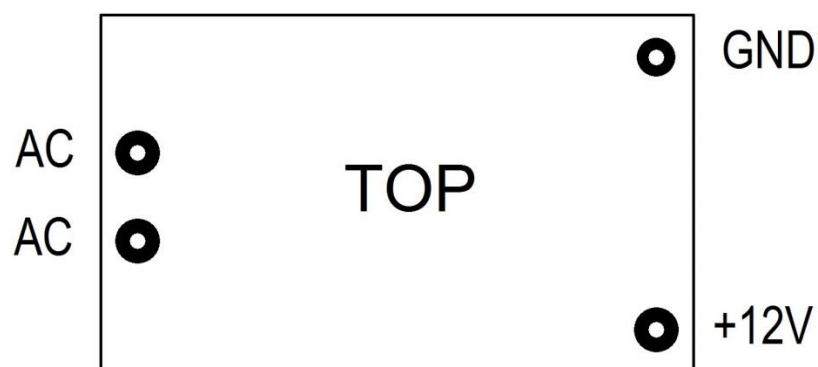
Micro SMPS

## 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