

AC/ DC converter



- **Universal Input: 110- 260 VAC**
- **Output: 3.3 VDC**
- **Full Isolation 1kV**
- **PCB mountable**
- **Compact IP Protected**

SO3V31000 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.

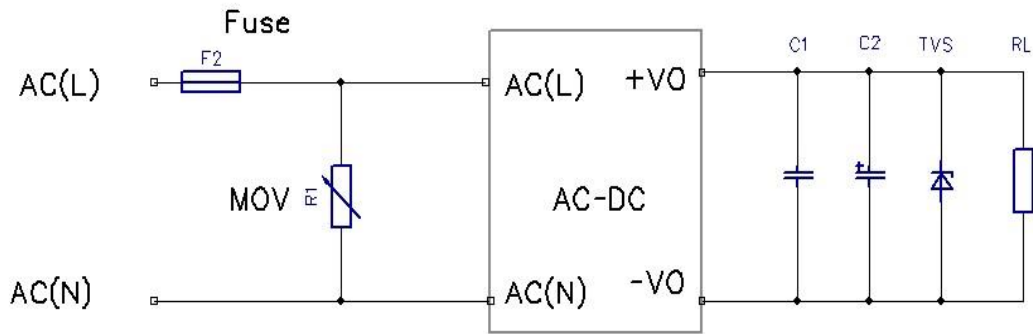
Input Specification					
Item	Operating condition	Min.	Typ.	Max.	Unit
Input Voltage Range	AC input	110		260	VAC
Input Voltage Range	DC input	270		300	VDC
Input frequency		50		60	Hz
Leakage current		0.1 mA RMS typ. 230 VAC/50 Hz			
Recommended external input fuse		1A/ 250V, slow fusing, necessary.			

Output Specification					
Item	Operating conditions	Min.	Typ.	Max	Unit
Output voltage accuracy	3.3V 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	50	500	mV
Output Current	3.3 VDC	-	-	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

Physical Specification

Casing Material	Black colour, heat resistant
Packaging Dimension	37.00 x 24.00 x 21.00 mm
Weight	22 gm (Typical)
Cooling method	Free air convection

Design reference



Typical Application Circuit

Model	C1(uF)	C2(uF)	Fuse	MOV	
SO3V31000	470uF	470uF	1A/250, slow fusing necessary	S14K350	

Note:

Output filtering capacitor is electrolytic capacitor; it recommended applying electrolytic capacitor with high frequency and low resistance. Above application circuit is for 3.3 VDC.

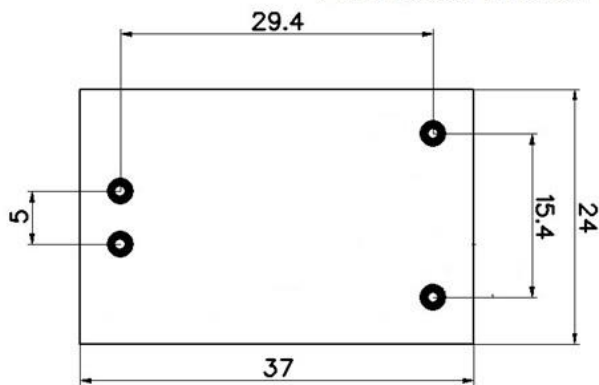
In practical module can be used for both output simultaneously with given specified range.



Footprint:

All Dimensions are in mm.

All Holes are of 1 mm in diameter.



All Dimensions are in mm.

All holes are of 1 mm in size.

Product height is of 21 mm.

Product width is of 24 mm

Product length is of 37 mm.