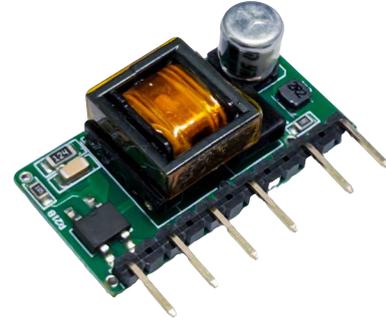


## SAB series 3Watt

### FEATURES:

- ✓ Global voltage input (85-305Vac,50/60Hz)
- ✓ Dc input (100-400Vdc)
- ✓ Low ripple noise
- ✓ Standby power consumption  $\leq 30\text{mW}$
- ✓ Multiple protection
- ✓ 100% burn-in test
- ✓ 3 year warranty



Model	Input voltage (Vac)	Output voltage (Vdc)	Output current (A)	Efficiency Typ.
SAB03-S05R2	85-305Vac	5V	0.6A	70%
SAB03-S09R2	85-305Vac	9V	0.333A	72%
SAB03-S12R2	85-305Vac	12V	0.25A	74%
SAB03-S15R2	85-305Vac	15V	0.2A	76%
SAB03-S24R2	85-305Vac	24V	0.125A	78%

Note: other input and output models may available on request;

### ELECTRICAL

#### Input

Parameters	Test Conditions / Comment	Min.	Typ.	Max.	Units
Input voltage	---	85	--	305	Vac
		100	--	400	Vdc
Input frequency	---	47	--	440	Hz
Input current	Vin=120Vac	--	120	--	mA
	Vin=230Vac	--	60	--	mA
Inrush current	Cold start, Vin=230Vac	--	23	--	A
	Cold start, Vin=115Vac	--	13	--	A
Leakage current	265Vac/50Hz	--	--	0.1	mA

**SAB series 3Watt**

<b>ELECTRICAL</b>					
<b>Output</b>					
<b>Parameters</b>	<b>Test Conditions / Comment</b>	<b>Min.</b>	<b>Typ.</b>	<b>Max.</b>	<b>Units</b>
Output voltage accuracy	--	--	±3	±6	%
Line regulation	--	--	±1.5	--	%
Load regulation	--	--	±2.5	--	%
Set-up rise time	Full load, Vin =115Vac	--	200	--	ms
	Full load, Vin =230Vac	--	100	--	ms
Hold-up time	Full load, Vin =115Vac	--	15	--	ms
	Full load, Vin =230Vac	--	40	--	ms
Ripple	---	--	100	--	mV P-P
<b>Protection</b>					
Over current	Hiccup mode, it will auto-recovery after fault condition is removed				
Over voltage	Hiccup mode, it will auto-recovery after fault condition is removed				
Short circuit	Hiccup mode, it will auto-recovery after fault condition is removed				
<b>Environment</b>					
Storage	Humidity: 10% RH to 95% RH	-40	--	+85	°C
Ambient operating temperature		-40	--	+70	°C
Operating relative humidity	Non condensing	--	--	85	%
MTBF	Full load, 230Vac input, 25°C ambient temperature	300	--	--	kHrs
Temperature coefficient	0.15%/ (0~ 50°C)				
Vibration coefficient	10~500Hz, 2G10min./1cycle, 60min.each along X, Y, Z axes				
Dimension(LxWxH)	33*17.5*11.5mm(L*W*H)				
1.This part is open frame, at least 6.4mm creepage distance between the primary and secondary external components of the module is needed to meet the safety requirement.					
2.Unless otherwise specified, parameters in this datasheet were measured under the condition ofTA=25°C , humidity<75%, normal input voltage(115Vac and 230Vac) and rated output load.					
3.In order to improve the light-loaded conversion efficiency, the module may have weak audio-frequency noise when the module load is less than 30% of the rated load, but it does not affect the performance and reliability of the product.					
4.Modules needs to be glued and fixed after installation.					

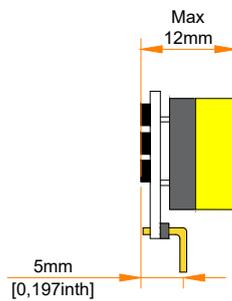
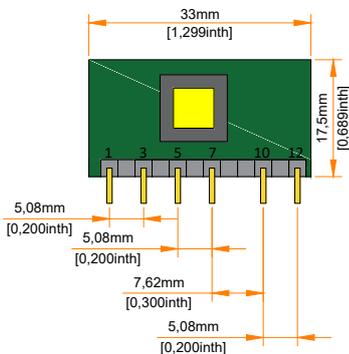
SAB series 3Watt

**ELECTRICAL**

**Safety**

Safety standards	EN62368,IEC62368,UL62368
Isolation voltage	I/P-O/P:3000VAC/60S
Insulation Resistance	I/P-O/P>100M Ohms/500VDC 25°C 70% RH
EMI / EMC	CISPR22/EN55022,CLASS A (refer to below application circuit)
ESD	IEC/EN 61000-4-2 ±4KV
RF Immunity	IEC/EN 61000-4-3 10V/S
Electrical Fast Transient	IEC/EN 61000-4-4 ±2KV (refer to below application circuit)
Surge	IEC/EN 61000-4-5 ±1KV/±2kv

**MECHANICAL**

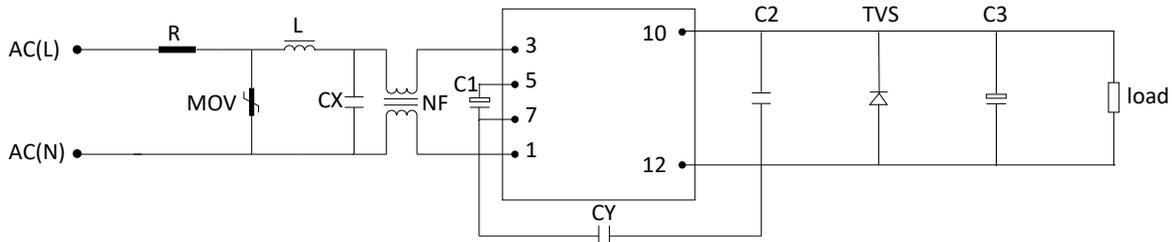


PIN #	define
1	AC
3	AC
5	+V(Cap)
7	-V(Cap)
10	-Vo
12	+Vo

SAB series 3Watt

NOTE

RECOMMENDED TEST AND APPLICATION CIRCUIT



1. C2 is a ceramic capacitor, used for filtering high frequency noise. C3 is the high frequency and low ESR electrolytic capacitor. A suppressor diode (TVS) is recommended to protect the application in case of the converter failure.
2. In general applications, the common mode choke NF in the dotted lines box do not have to be used, the common mode choke L=30mH, this inductance needs to be added when higher EMC requirements need to be met.
3. If you need any technical support, please contact us.

EMC RECOMMENDED APPLICATION CIRCUIT

	5VDC	9VDC	12VDC	15VDC	24VDC
R			30Ω/1W		
MOV			10D561K		
L			2mH		
C1			4.7uF/450V		
C2			104K/50V		
CX			104K/275Vac		
CY			1nF/400Vac		
C3	330uF/16V	330uF/16V	220uF/16V	150uF/25V	150uF/35V
TVS	SMBJ7.0A	SMBJ12A	SMB20A	SMBJ30A	SMBJ30A