FEATURES :

- Universal Input 90~305VAC
- High Efficiency Up To 85%
- Protection: Short Circuit / Over Load
- Energy Efficiency Conforms to DOE6
- No Load Power Consumption<0.1W
- Ultra small size
- 3 Years Warranty
- ROHS Compliant

YUAN DEAN SCIENTIFIC

Green AC-DC Converter

GS6G SERIES

6Watt

3KVac Isolated

Single Output

Open Frame

Specifications typical at TA=25°C, nominal input voltage and rated output current unless otherwise specified

Part Number	Output Wattage	Output Voltage	Output Current	Efficiency	Max. Capacitive Load
	(W)	(VDC)	(mA)	(TYP %)	(μF)
GS6G-S03(F)-X	3.3	3.3	1000	71	2200
GS6G-S05(F)-X	5	5	1000	75	2200
GS6G-S09(F)-X	6	9	667	82	1300
GS6G-S12(F)-X	6	12	500	83	820
GS6G-S15(F)-X	6	15	400	83	470
GS6G-S24(F)-X	6	24	250	85	180
GS6G-S36(F)-X	6	36	167	85	120
GS6G-S48(F)-X	6	48	125	85	68

Note:

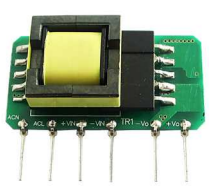
1. Add suffix "F" for 90°bending Products. For example: GS6G-S05F, GS6G-S12F
2. X= ONE digit representing the output power (W) The output power is rising in steps of 1W from 1W to the max. output Power; When the output power is maximum power, X is omitted.
   E.g:3W=GS6G-S05-3, GS6G-S15-3 6W=GS6G-S05, GS6G-S15

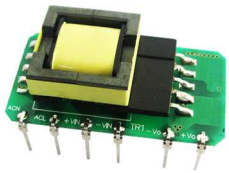
Input Specifications

Parameters	Conditions		Min	Typ	Max	Units
Rated Input Voltage	Vo,Io nom			100~277		Vac
Voltage Range	Vo, Io nom	AC in	90		305	Vac
		DC in	70		430	Vdc
Line Frequency	Vi nom, Io nom		47		63	Hz
Input Current	Io nom	Vi:115VAC			0.12	A
		Vi:230VAC			0.06	A
Inrush Current	Io nom	Vi:115VAC		10		A
		Vi:230VAC		15		A

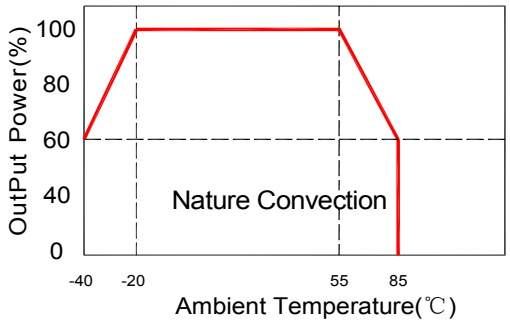
Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Output Voltage Accuracy	Vi nom, Io nom			±5	%
Minimum Load	Vi nom	0			%
Line Regulation	Io nom, Vi min...Vi max		±1.5		%
Load Regulation	5%~100% Load		±2.5		%
No Load				0.1	W
Ripple & Noise	Vi nom, Io nom, BW=20MHz(3.3-5V)		50	150	mVp-p
Ripple & Noise	Vi nom, Io nom, BW=20MHz(9-24V)		80	150	mVp-p
Ripple & Noise	Vi nom, Io nom, BW=20MHz(36-48V)		150	240	mVp-p
Protection	Over Load	Above 110% rated output power			
		Protection type: Recovers automatically after fault condition is removed			
	Short circuit	Recovers automatically after fault condition is removed			





Temperature Derating Graph



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Rev:0 2019/04/22

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency	Vi nom, Io nom		65		KHz
Isolation Voltage	Input / Output		3KVac/ 5mA/5Secs		
Isolation Resistance	Input / Output,@500Vdc	100			MΩ
Operating Temperature	Refer to Temperature Derating Graph	-40		+85	℃
Storage Temperature	Non Operational	-40		+105	℃
Relative Humidity	Vi nom, Io nom			85	% RH
Safety Standards	Design refer to UL62368-1,IEC62368-1				
EMI Conduction & Radiation	EN55032,CLASS B(See Fig. 1 for recommended circuit)				
EMS Immunity	EN61000 (See Fig. 1 for recommended circuit)				
Dimension	L35.0 x W11.0 x H19.5 mm				
Cooling	Free air convection				

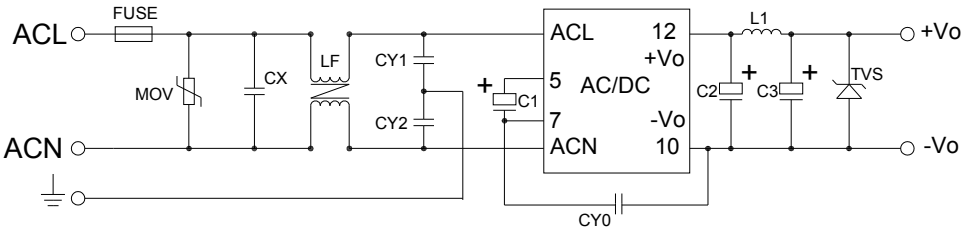
Part Number

GS6G - S 05 X

A B C D

A : Series
B : Single Output
C : Output Voltage
D : Output Power

EMC Solution-Recommended Circuit



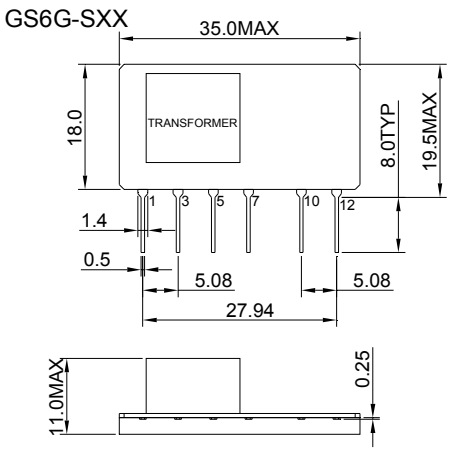
	3.3~48V
FUSE	250V/1A
MOV	07D471K
LF	UU9.8,30mH Min
CX	0.1uF/275V
CY1	470pF/250V
CY2	

	3.3~5V	9~15V	24~48V
C1	12uF/450V		
CY0	1000pF/250V		
C2	680uF/10V	220uF/25V	33uF/63V
C3	470uF/10V	100uF/25V	33uF/63V
L1	2.2uH		

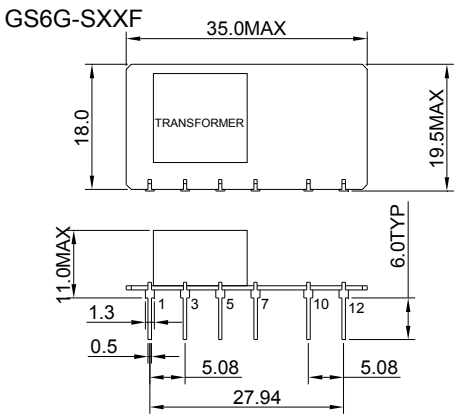
	3.3~5V	9V	12V,15V	24V	36V	48V
TVS	SMBJ7.0A	SMBJ12A	SMBJ20A	SMBJ30A	SMBJ43A	SMBJ57A

Fig.1

Markings and Dimensions



	Model
PIN	Single
1	ACN
3	ACL
5	+V(cap)
7	-V(cap)
10	-Vo
12	+Vo



UNIT:mm Unless otherwise specified,all tolerances are ±0.5