

FEATURES:

- Universal Input 85~305VAC
- High Efficiency Up to 81%
- Protection: Short Circuit / Over Load
- Ultra SmallSize
- 2 Years Warranty
- ROHS Compliant

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)
GS5-S03(F)	3.3	3.3	1000	69	2200
GS5-S05(F)	5	5	1000	76	1500
GS5-S09(F)	5	9	560	77	680
GS5-S12(F)	5	12	420	79	470
GS5-S15(F)	5	15	340	79	330
GS5-S24(F)	5	24	210	81	100

Note:

add suffix"F"for 90°bending Products. For example:GS5-S05F,GS5-S12F

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Rated Input Voltage	Vo,lo nom		100~277		Vac
Voltage Range	Vo,lo nom	AC in	85	305	Vac
		DC in	100	430	Vdc
Line frequency	Vi nom, Ionom	47		63	Hz
Input Current	Io nom	Vi:115VAC		0.20	A
		Vi:230VAC		0.10	A
Inrush Current	Io nom	Vi:115VAC	13		A
		Vi:230VAC	23		A

Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Output Voltage Accuracy	3.3V		±8		%
	5~24V		±5		%
Line Regulation	Io nom, Vi min...Vi max		±1.5		%
Load Regulation	10%~100% Load		±2.5		%
No Load			0.10	0.15	W
Ripple & Noise	Vi nom, Io nom, BW=20MHz		80	150	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			

Note: The product is able to work with 0% - 10% load and with stable output.

Volgen

AC-DC Converter

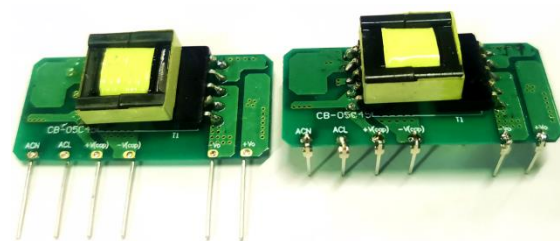
GS5 SERIES

5Watt

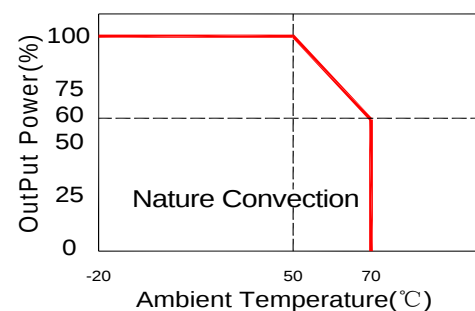
3KVac Isolated

Single Output

Open Frame



Temperature Derating Graph



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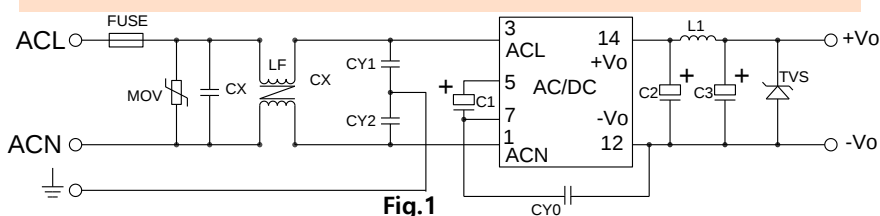
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency	V_i nom, I_o nom		60		KHz
Isolation Voltage	Input / Output	3KVac/ 5mA/5Secs			
Isolation Resistance	Input / Output, @500 Vdc	100			MΩ
Operating Temperature	Refer to Temperature Derating Graph	-20		+70	°C
Storage Temperature	Non Operational	-40		+105	°C
Relative Humidity	V_i nom, I_o nom			85	% RH
Safety Standards	UL 62368-1, IEC62368-1 approved				
EMI Conduction & Radiation	EN55032, CLASS B (See Fig. 1 for recommended circuit)				
EMS Immunity	EN55035 (See Fig. 1 for recommended circuit)				
Dimension	L42.0 x W11 x H20.0 mm				
Cooling	Free air convection				

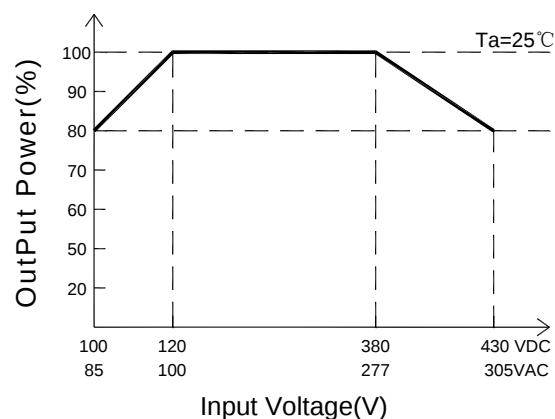
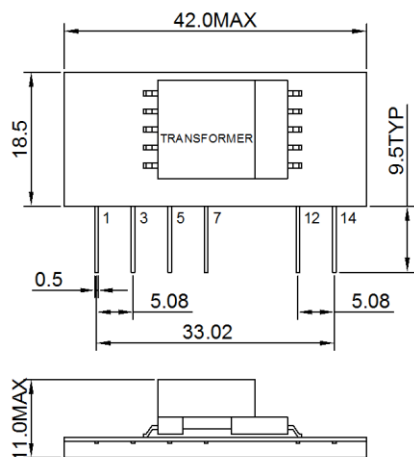
Part Number

GS5 - S 05 (F)
A B C D

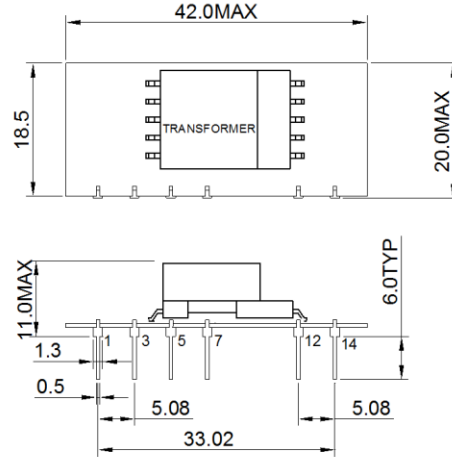
A : Series
B : Single Output
C : Output Voltage
D : Package

EMC Solution-Recommended Circuit

Fig. 1

	3.3~24V		3.3~5V	9~15V	24V
FUSE	300V/2A	C1	15uF/450V		
MOV	14D561K	CY0	1000pF/400V		
LF	UU9.8,30mH Min	C2	820uF/10V (solid-state capacitor)	470uF/25V (solid-state capacitor)	330uF/35V (solid-state capacitor)
CX	0.1uF/310V	C3	470uF/10V	220uF/35V	
CY1	470pF/250V	L1	2.2uH		
CY2					
	3.3~5V		9V	12V,15V	24V
TVS	SMBJ7.0A		SMBJ12A	SMBJ20A	SMBJ30A

Input Voltage Derating Graph

Markings and Dimensions
GS5-SXX


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

GS5-SXXF


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

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