

**FEATURES:**

- Ultra-wide 85 - 305VAC and 70 - 430VDC input voltage
- High efficiency up to 80%
- Protection: short circuit / over load
- Accepts AC or DC input (dual-use of same terminal)
- No Load Power Consumption 0.1W
- Output short circuit, over-current protection
- 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)
GS3H1-S03(F)	1.98	3.3	600	67	820
GS3H1-S05(F)	3	5	600	72	680
GS3H1-S09(F)	3	9	333	76	470
GS3H1-S12(F)	3	12	250	77	470
GS3H1-S15(F)	3	15	200	78	330
GS3H1-S24(F)	3	24	125	80	200

Note:

add suffix "F" for 90° bending Products. For example: GS3H1-S05F

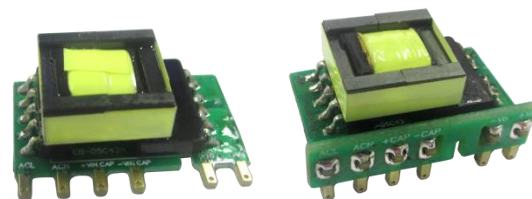
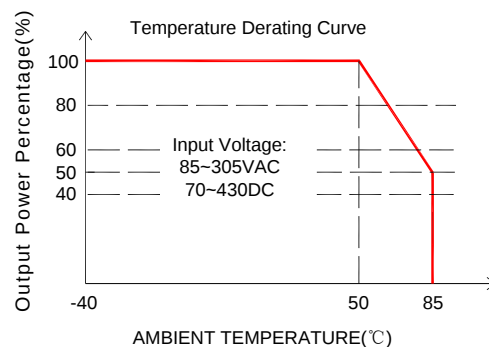
Input Specifications

Parameters	Conditions	Min	Typ	Max	Unit
Rated Input	Vo, Io nom		100~277		Vac
Voltage Range	Vo, Io nom	AC in	85	305	Vac
		DC in	70	430	Vdc
Line frequency	Vi nom, Ionom	47		63	Hz
Input Current	Io nom	Vi:115VAC		0.12	A
		Vi:230VAC		0.06	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, 10%~100% load		±8		%
	5~24V, 10%~100% load		±5		%
Minimum Load		10			%
Line Regulation	Io nom, Vi min...Vi max		±1.5		%
Load Regulation	10%~100% Load		±3.0		%
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****GS3H1 SERIES****3Watt****3.6KVac / 5KVdc Isolated****Single Output****Open Frame****Temperature Derating Graph****CONTACT US**

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General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency	Vi nom, Io nom		65		KHz
Isolation Voltage	Input / Output	3.6KVac/ 5mA/5Secs			Vac
		5KVdc/ 5mA/5Secs			Vdc
Operating Temperature	Refer to Temperature Derating Graph	-40		+85	°C
Storage Temperature	Non Operational	-40		+105	°C
Relative Humidity	Vi nom, Io nom			95	% RH
Safety Standards	UL 62368-1, IEC62368-1 approved				
EMI Conduction & Radiation	EN55032, CLASS B (See Fig. 2 for recommended circuit)				
EMS Immunity	EN55035 (See Fig. 2 for recommended circuit)				
Dimension	L26.4 x W14.73 x H11.0 / L27.84 x W11.60 x H17.60 mm				
Cooling	Free air convection				

Part Number

$\frac{\text{GS3H1}}{\text{A}}$ - $\frac{\text{S}}{\text{B}}$ $\frac{\text{XX}}{\text{C}}$ $\frac{\text{(F)}}{\text{D}}$

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

Basic Application

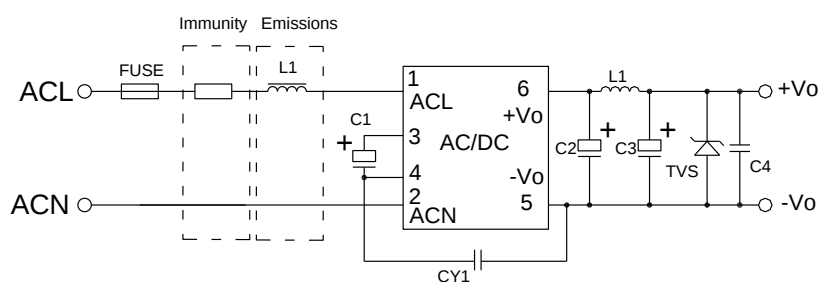
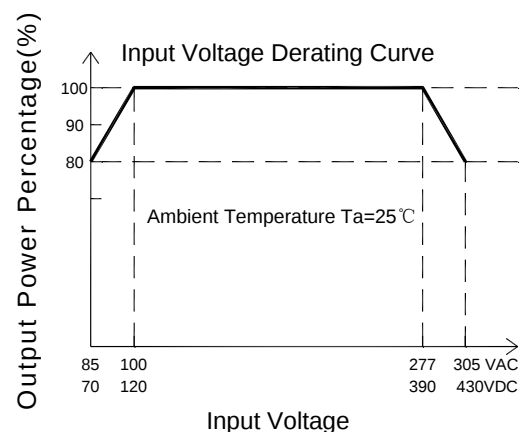


Fig.1

Input Voltage Derating Graph



EMC Solution-Recommended Circuit

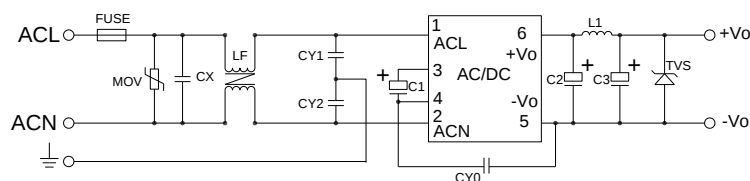


Fig.2

	3.3~24V		3.3~5V	9~15V	24V
FUSE	300V/2A	C1	10uF/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

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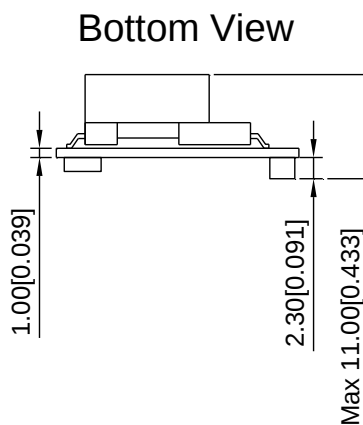
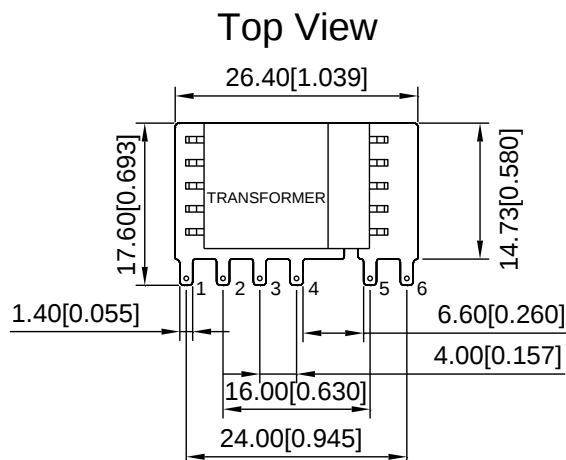
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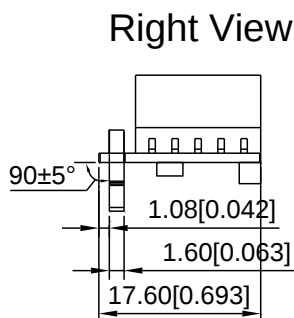
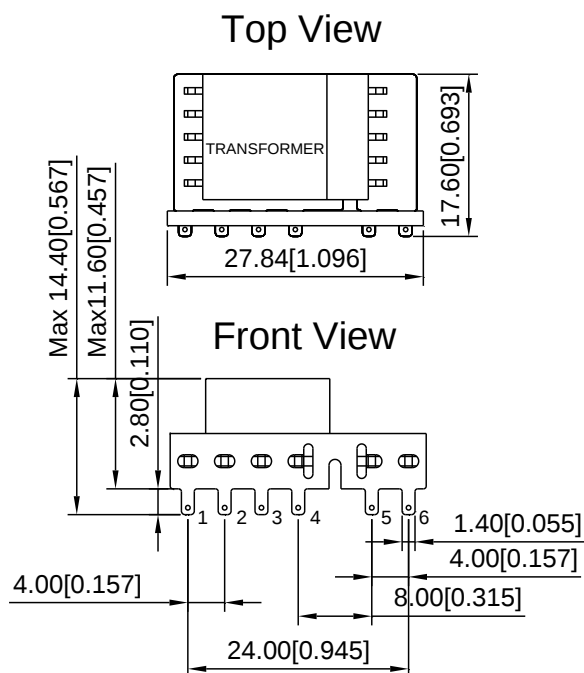
GS3H1-SXX Dimensions



PIN	Model
1	ACL
2	ACN
3	+V(cap)
4	-V(cap)
5	-Vo
6	+Vo

Note:
Unit: mm(inch)
Pin section tolerances: +0.15(+0.006)
General tolerances: +1.0(+0.040)

GS3H1-SXXF Dimensions



PIN	Model
1	ACL
2	ACN
3	+V(cap)
4	-V(cap)
5	-Vo
6	+Vo

Note:
Unit: mm(inch)
Pin section tolerances: +0.15(+0.006)
General tolerances: +1.0(+0.040)

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