

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, 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	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.

YUAN DEAN SCIENTIFIC



AC-DC Converter

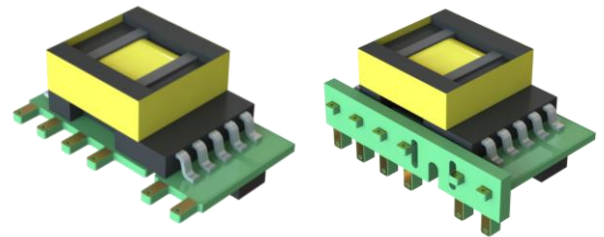
GS3H1SERIES

3Watt

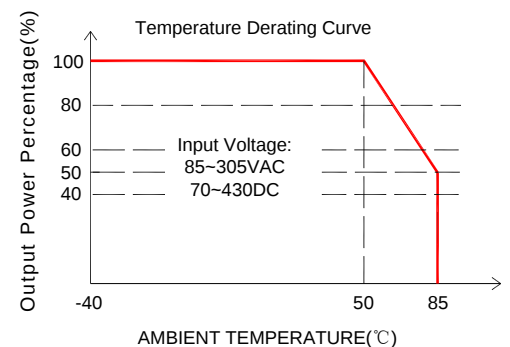
3.6KVac / 5KVdc Isolated

Single Output

Open Frame



Temperature Derating Graph



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

GS3H1

A

-

S

B

XX

C

(F)

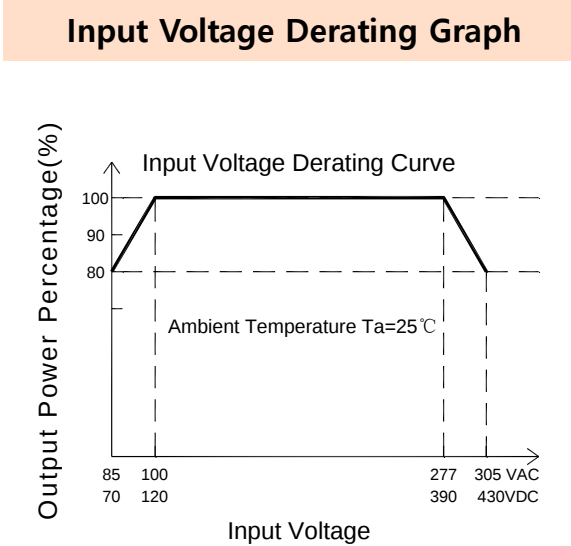
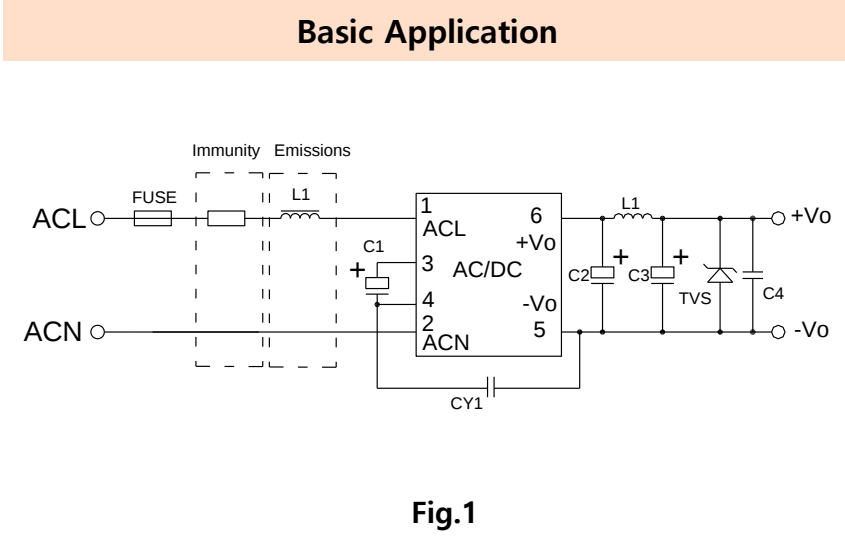
D

A : Series

B : Single Output

C : Output Voltage

D : Package



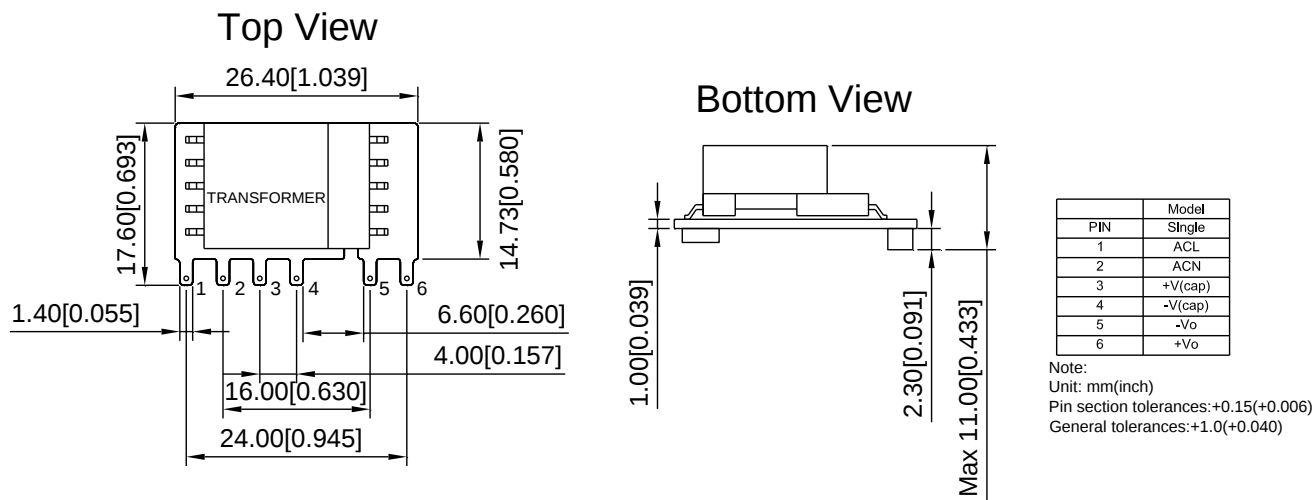
EMC Solution-Recommended Circuit

The diagram shows an EMC solution recommended circuit. It includes a fuse, MOV, EMI filter (LF, CX, CY1, CY2), and a common-mode choke (CY0). The input lines (ACL, ACN) connect to the converter's pins 1 (ACL), 2 (ACN), and 3 (AC/DC). Pin 4 is connected to ground. The output is filtered by an LC network (L1, C2, C3, C4) and a TVS diode.

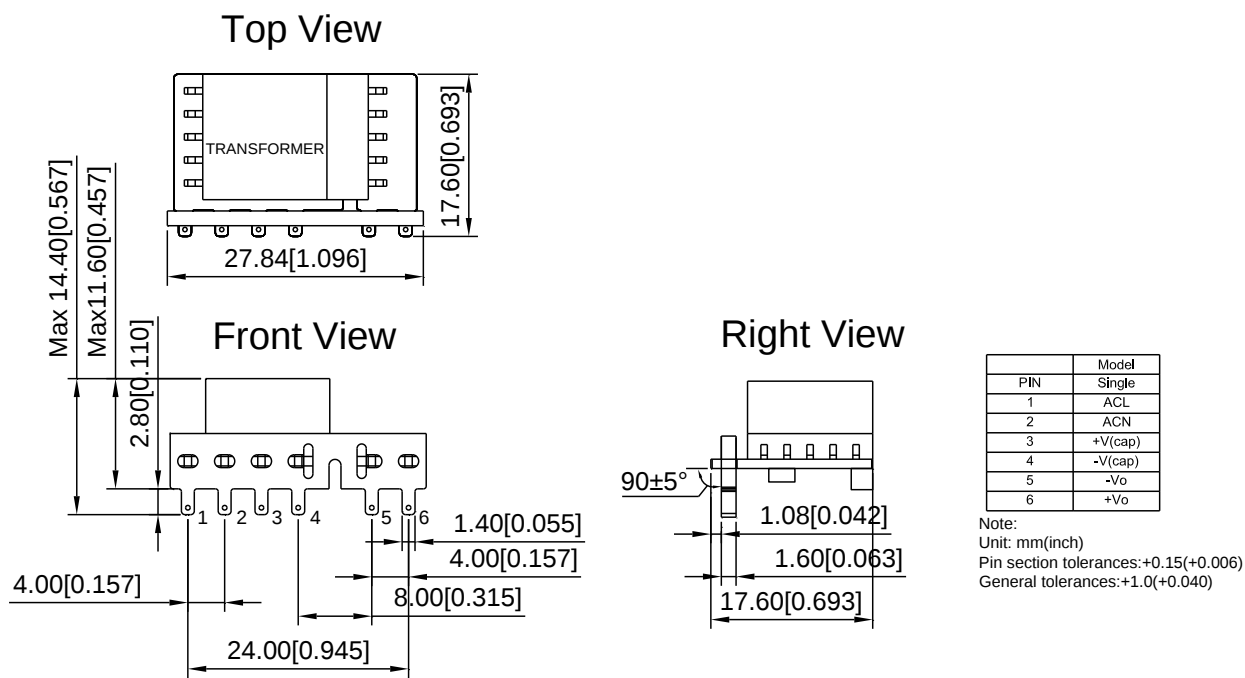
Fig.2

	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		
CY1	470pF/250V	220uF/35V			
CY2		L1	2.2uH		
	3.3~5V		9V	12V,15V	24V
TVS	SMBJ7.0A		SMBJ12A	SMBJ20A	SMBJ30A

GS3H1-SXX Dimensions

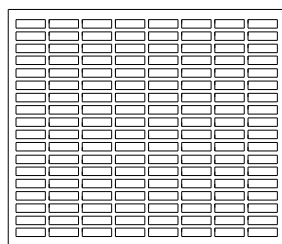


GS3H1-SXXF Dimensions

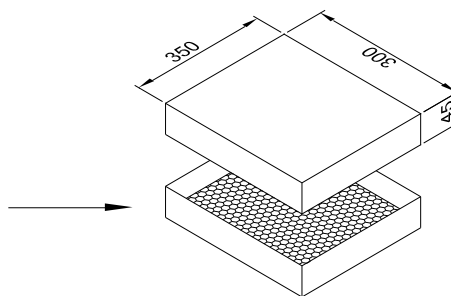


GS3H1-SXX Package

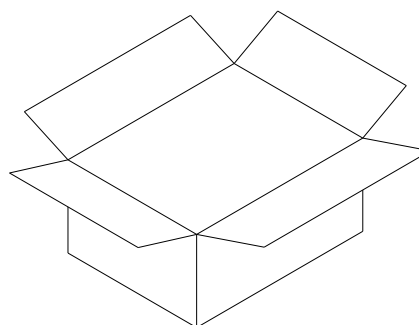
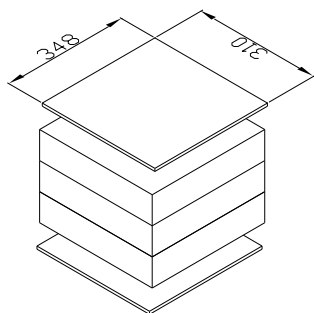
1.Weight:5.5grams/pcs 2.outer carton unit: 432pcs/box 3.Weight: 4.1kg per carton



144Pcs/BOX



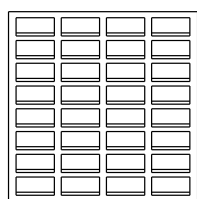
Box Size:350x300x45



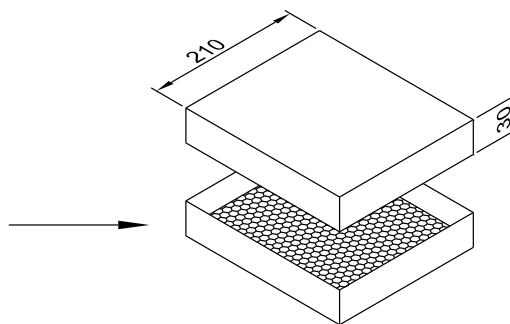
Outer carton: 375x320x160mm

GS3H1-SXXF Package

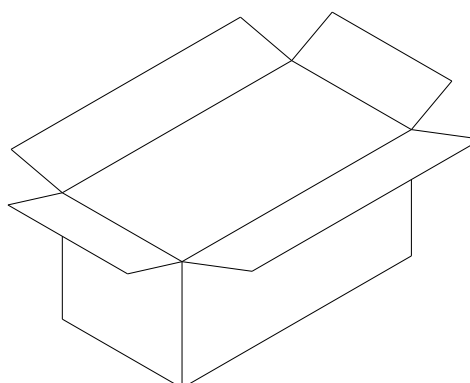
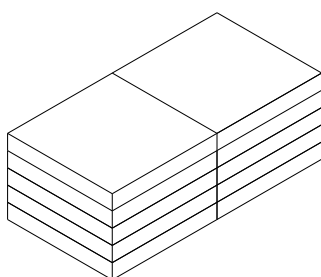
1.Weight:6.3grams/pcs 2.outer carton unit: 320pcs/box 3.Weight: 4.1kg per carton



32Pcs/BOX



Box Size:210x210x30



Outer carton: 460x240x220mm

www.yds.com.tw



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