

FEATURES :

- Universal Input 90~264VAC
- High Efficiency Up To 85%
- Protection: Short Circuit /Over load
- Fully Encapsulated Plastic Case
- 3 Years Warranty
- ROHS Compliant

YUAN DEAN SCIENTIFIC



AC-DC Converter

GA10D SERIES

10~12Watt

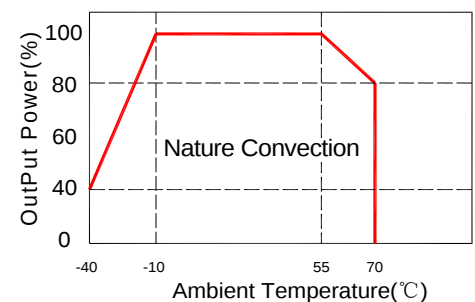
4KV Isolated

Single Output

Module



Temperature Derating Graph



www.yds.com.tw

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

Part Number	Output Wattage	Output Voltage	Output Current	Ripple & Noise	Efficiency
	(W)	(VDC)	(mA)	(mV) max (Note)	(TYP %)
GA10D-S03	6.6	3.3	2000	150	72
GA10D-S05	10.0	5	2000	150	75
GA10D-S10	10.0	10	1000	150	80
GA10D-S12	12.0	12	1000	150	82
GA10D-S15	12.0	15	800	150	82
GA10D-S24	12.0	24	500	150	85
GA10D-S36	12.0	36	330	240	85
GA10D-S48	12.0	48	250	240	85

Input Specifications

Parameters	Conditions	Min	Typ	Max	Units
Rated Input Voltage	Vo, Io nom		100~240		Vac
Voltage Range	Vo, Io nom	AC in	90	264	Vac
		DC in	120	370	Vdc
Line Frequency	Vi nom, Io nom	47	50/60	63	Hz
Inrush Current	Io nom	Vi:115VAC		10	A
		Vi:230VAC		20	A



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Output Specifications

Parameters	Conditions	Min	Typ	Max	Units
Output Voltage Accuracy	Vi nom, Io nom	3.3...5V Models		±3	%
		10...48V Models		±2	%
Minimum Load	Vi nom	0			%
Line Regulation	Io nom, Vi min...Vi max		±0.2		%
Load Regulation	Vi nom, Io min...Io nom	3.3V Models	±1.0		%
		5...48V Models	±0.5		%
Transient Recovery time	Vi nom, Io nom = $\longleftrightarrow$ 0.5 Io nom		1000		us
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 :

Ripple & noise is measured by using 20 MHz bandwidth, measured with a 47uf paralleled with a high-frequency 0.47uf capacitor across each output by full load.

General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Switching Frequency	Vi nom, Io nom		65		KHz
Isolation Voltage	Input / Output		4KVac/ 5mA/5Secs		
Isolation Resistance	Input / Output, @500 Vdc	100			MΩ
Operating Temperature	Refer to Temperature Derating Graph	-40		+70	°C
Storage Temperature	Non Operational	-40		+105	°C
Relative Humidity	Vi nom, Io nom		95		% RH
Safety Standards	Design refer to UL60950-1, IEC60950-1				
EMI Conduction & Radiation	EN55022, CLASS B (See Fig. 1 for recommended circuit)				
EMS Immunity	EN61000 (See Fig. 1 for recommended circuit)				
Dimension	L50.8 x W25.4 x H23.5 mm				
Cooling	Free air convection				

Part Number

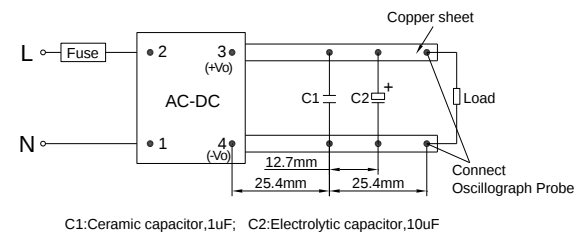
GA10D - S 03
A B C

A: Series

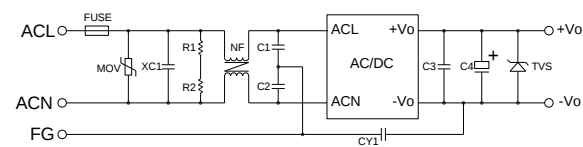
B: Single Output

C: Output Voltage

Parallel Lines Measure



EMC solution-recommended circuit



NOTE:

MOV: 14D-561K

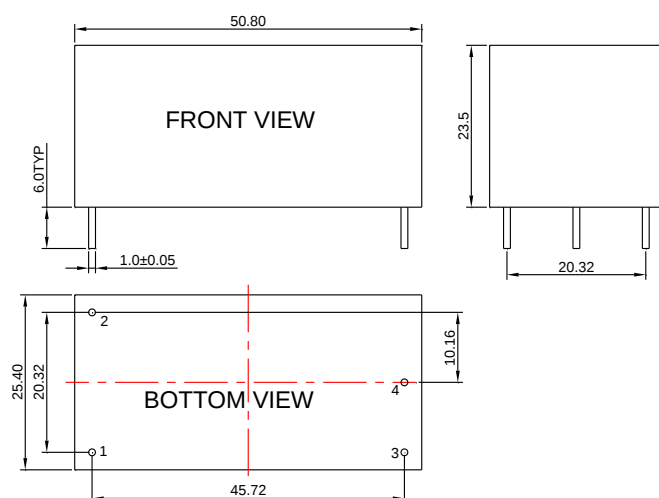
XC1: 0.47uF/275V, X2

R1/R2: 750K, 1206

NF: UU9.8, 20mH

C1/C2: 2200pF/250V, Y2

Markings and Dimensions



	Model
PIN	Single
1	ACN
2	ACL
3	+Vo
4	-Vo

Unit : mm Unless otherwise specified, all tolerances are ± 0.50