

5Watt, Single Output , Medical AC/DC Open Frame Converter



GB5M - S 05
A B C

A:Series
B:Single Output
C:Output Voltage

Features:

- Universal Input 80~264VAC
- Medical safety design refer to (2 X MOPP) according to ANSI/AAMI ES60601-1 and IEC/EN60601-1
- Suitable for BF application with appropriate system consideration
- No load power consumption<0.1W
- Extremely low leakage current
- EMI class B for class II configuration
- Protection: Short Circuit /Overload/Over Voltage/Over Temperature
- No minimum load required
- 2 Years Warranty ● ROHS Compliant

Applications:

- Portable medical device
- Mobile clinical workstation
- Medical computer monitor
- Medical examination instrument

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 %)
GB5M-S05	5.0	5	1000	100	76
GB5M-S12	5.0	12	420	150	80
GB5M-S15	5.0	15	330	150	81
GB5M-S24	5.0	24	230	180	82

Notes: 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.

Input Specifications

Parameters	Conditions		Min	Typ	Max	Units	
Rated Input Voltage	Vo,Io nom			100~240		Vac	
Voltage Range	Vo,Io nom	AC in	80		264	Vac	
		DC in	105		370	Vdc	
Line frequency	Vi nom,Ionom		47	50/60	63	Hz	
Inrush Current	Io nom	Vi:115VAC			25	A	
		Vi:230VAC			45	A	
Input Current(Full load)		0.2A (115Vac) 0.1A (230Vac)					
Input Fuse		VDE/UL/CCC FUSE 2.5A/250V (Slow blow).					

Output Specifications

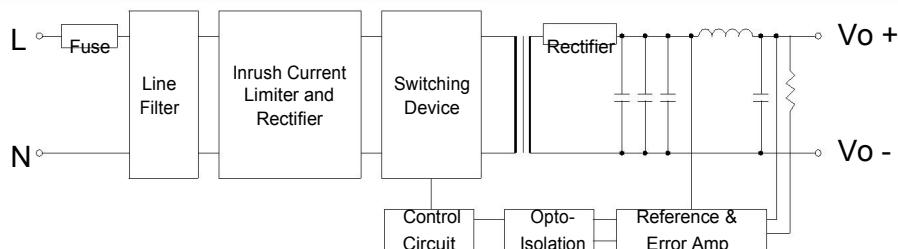
Parameters	Conditions		Min	Typ	Max	Units
Output Voltage Accuracy	Vi nom,Io nom	5V Models			±3	%
		12/15/24V Models			±2	%
Minimum Load	Vi nom		0			%
Line Regulation	Io nom,Vi min...Vi max			±0.3		%
Load Regulation	Vi nom, Io min...Io nom			±0.5		%
Protection	Overload		Above 110% rated output power			
	Short circuit		Recovering automatically after fault condition is removed			
	Over Voltage		110%-150% rated output Voltage			
	Over Temperature		Protection type:Zener diode clamp			
			Protection type:Shut down o/p voltage, recovers automatically after temperature goes down			

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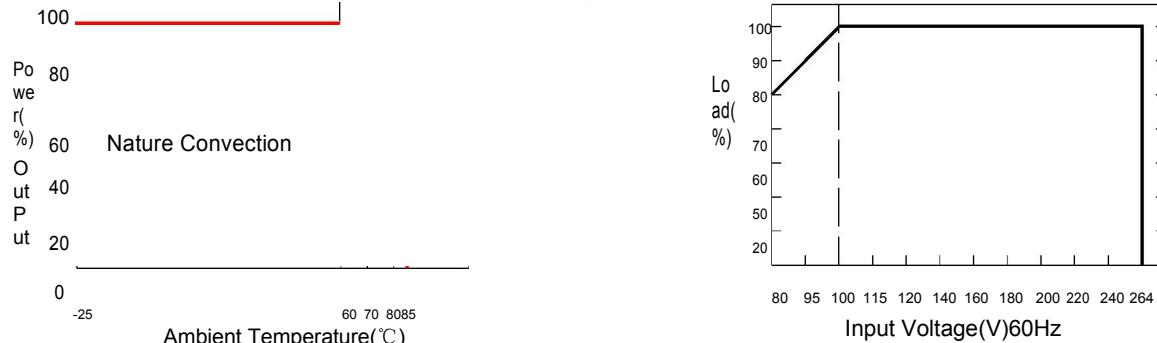
General Specifications

Parameters	Conditions	Min	Typ	Max	Units
Isolation Voltage	Input / Output	4KVac/	5mA/60Secs		
Isolation Resistance	Input / Output,@500 Vdc	100			MΩ
Operating Temperature	Operating at Vi nom,lo nom	-25		+85	°C
Storage Temperature	Non Operational	-40		+100	°C
Relative Humidity	Vi nom,lo nom			95	% RH
Dimension		L48.5x W23 x H14.0mm			
Cooling	Free air convection				

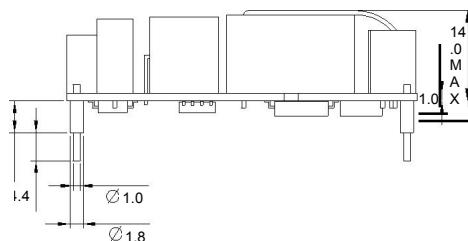
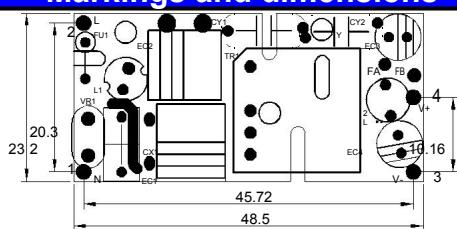
Circuit Schematic



Output Derating VS Input Voltage



Markings and dimensions



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

PIN Connection

PIN	1	2	3	4
GB5M	ACN	ACL	-Vo	+Vo