FEATURES

- Single Output
- 3000VAC I/O Isolation
- MTBF > 300,000 Hours
- High Efficiency up to 76%
- EMC Complies with EN61000
- Meets IEC61140 Safety Class II
- IEC / EN / UL 60950-1 Safety Standards
- 90~264VAC, 47~440Hz Universal Input Range
- Operating Temperature to +71°C (Refer to Derating Curve)
- EMI Complies with EN55022 Class B and FCC part 15, level B

DESCRIPTION

The PSAGF-10 series of AC/DC power supplies offers 10 Watts of output power in an encapsulated design. This series has single output models with a universal input range of 90 ~264VAC. Other features include continuous short circuit protection, over voltage protection, and output current limitation. EMC meets EN61000-4 (-2,-3,-4) and EMI meets EN55022 level B conducted noise. The compliance to these EMI specifications minimizes system design time, cost, and eliminates the need for external filter components. The PSAGF-10 series has IEC / EN / UL 60950-1 safety approvals which qualifies this product for worldwide markets. This series has a wide variety of applications including both commercial and industrial with a MTBF of 330,000 hours.

SPECIFICATIONS: *PSAGF-10 Series*

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

SPECIFICATIONS	TEST CONDITIONS		Min	Typ	Max	Unit
INPUT (V_{in})						
Operating Voltage Range			90		264	VAC
Input Frequency			47		440	Hz
Inrush Current	cold start at 25°C	115VAC			15	A
		230VAC			30	A
External Input Fuse (Recommended)			1.5A Slow – Blow Type			
OUTPUT (V_o)						
Output Voltage			See Table			
Output Voltage Accuracy				±1.0	±2.0	%
Load Regulation	Io = min. to max.			±0.5	±1.0	%
Line Regulation	Vin = min. to max.			±0.5	±1.0	%
Output Power			See Table			
Output Current			See Table			
Minimum load			10% of Io			
Ripple & Noise (20MHz BW)	3.3VDC & 5VDC Output Models			1.5	1.8	% Vp-p
	Other Output Models			0.8	1.0	% Vp-p
Overshoot					5.0	%
Hold-up Time	115VAC, 60Hz			15		ms
PROTECTION						
Over Voltage Protection	Zener diode clamp			120		% of Vo
Current Limitation	85VAC, Hiccup technique, auto-recovery		105			%
Short Circuit Protection			Hiccup mode, indefinite (auto-recovery)			
GENERAL						
Efficiency			See Table			
Switching Frequency				125		KHz
Isolation Voltage	Input to output, 60 seconds		3000			VAC
Isolation Test Voltage	Input to output, flash tested for 1 second		4700			VDC
Isolation Resistance	500VDC		100			MΩ
ENVIRONMENTAL						
Operating Temperature	Ambient		-25		+71	°C
Storage Temperature			-40		+85	°C
Humidity					95	%
Cooling			free air convection			
Temperature Coefficient	All Outputs			±0.01	±0.02	%/°C
MTBF	MIL-HDBK-217F @ 25°C, Ground Benign		330,000 hours			
PHYSICAL						
Weight			Approximately 1.90oz (54g)			
Dimensions (L x W x H)			2.06 x 1.07 x 0.93 inches 52.4 x 27.2 x 23.5 mm			
Flammability			UL94V-0			
Case Material			Plastic resin and Fiberglass			
SAFETY						
Safety Approvals			IEC / EN / UL 60950-1[(5)]			
Conducted EMI			EN55022 Class B			
Conducted EMC			EN61000-4-2, EN61000-4-3, EN61000-4-4			

MODEL SELECTION GUIDE

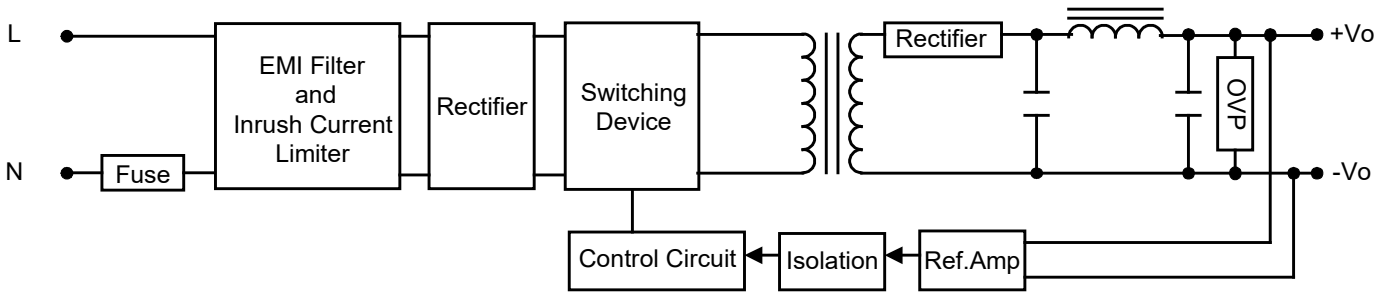
Model Number	Output Voltage	Output Current		Input Current (2)		Output Power	Efficiency (typical)	Maximum Capacitive Load
		Min	Max	No load	Max load			
PSAGF-10S03	3.3 VDC	250mA	2500mA	15mA	171mA	8.25W	70%	2200µF
PSAGF-10S05	5 VDC	200mA	2000mA	15mA	201mA	10W	72%	2200µF
PSAGF-10S12	12 VDC	83mA	833mA	15mA	191mA	10W	76%	1000µF
PSAGF-10S15	15 VDC	67mA	667mA	15mA	193mA	10W	75%	1000µF
PSAGF-10S24	24 VDC	42mA	417mA	15mA	201mA	10W	72%	680µF

NOTES

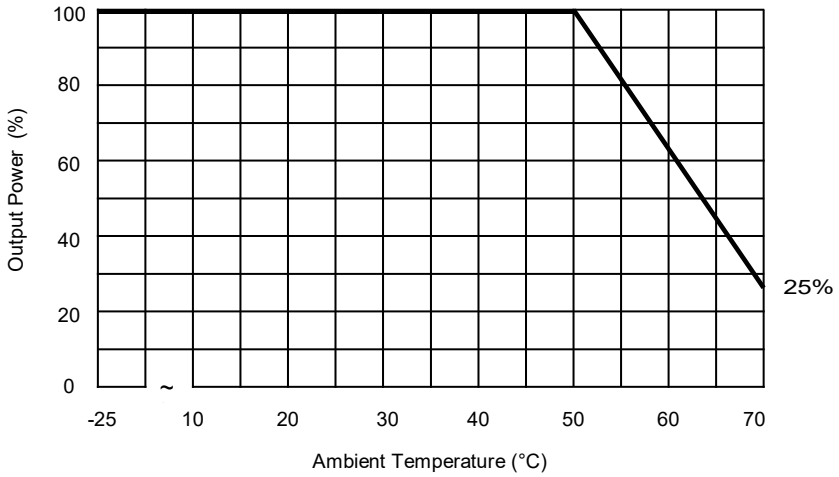
1. These power modules require a minimum output loading to maintain specified regulation. Operation under no-load conditions will not damage these devices; however they may not meet all listed specifications.
2. Input Current is measured at 115VAC, 60Hz.
3. Other input and output voltages may be available, please contact factory.
4. All AC/DC modules should be externally fused at the front end for protection.
5. This product is Listed to applicable standards and requirements by UL.

**Due to advances in technology, specifications subject to change without notice.*

BLOCK DIAGRAM

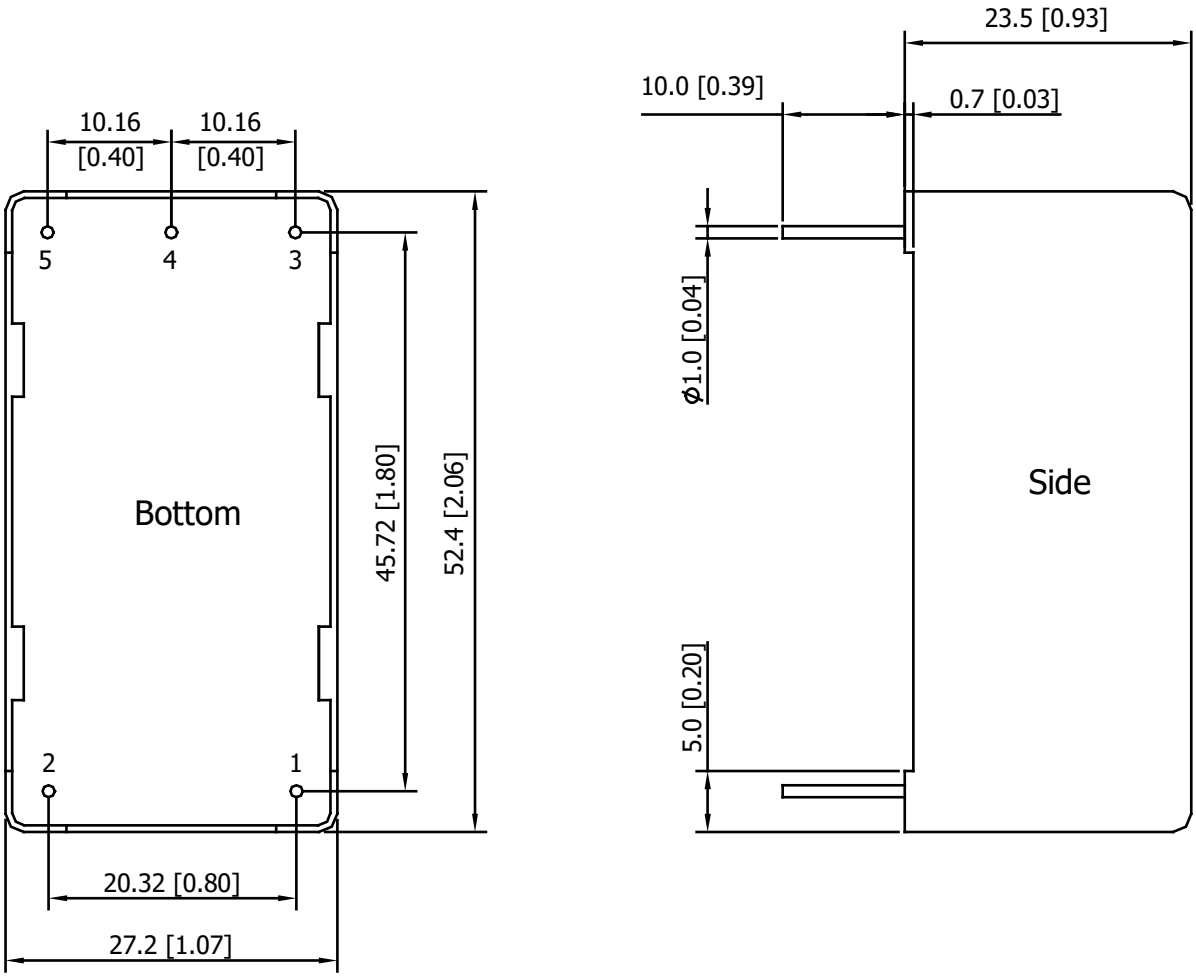


DERATING CURVE



MECHANICAL DRAWING

Unit: mm [inches]



PIN CONNECTIONS	
Pin	**Single Output**
1	AC (N) - AC Neutral
2	AC (L) - AC Line
3	+Vout
4	-Vout
5	No Pin

Tolerance	Millimeters	Inches
	X.X±0.5	X.XX±0.02
	X.XX±0.25	X.XXX±0.01
Pin	±0.1	±0.004

COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

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