





#### Size:

1.12 x 1.02 x 0.67 inches 28.5 x 25.8 x 17.0 mm

### **FEATURES**

- RoHS Compliant
- Isolation Class II
- 3000VAC I/O Isolation
- 2 Watts Output Power
- Fully Encapsulated Plastic Case
- < 0.3W No Load Input Power</li>

- 3.3V, 5V, 12V, 15V, and 24V Single Output Models
- PCB Mountable Switching Power Supply
- -40°C to +80°C Operating Temperature Range
- Universal Input Voltage Range: 90-305VAC (120-430VDC)
- Short Circuit and Over Voltage Protection
- UL/cUL, CE, and CB Safety Approvals (Pending)

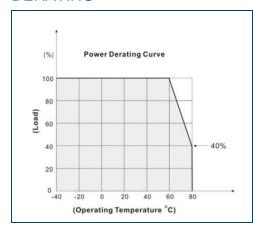
#### DESCRIPTION

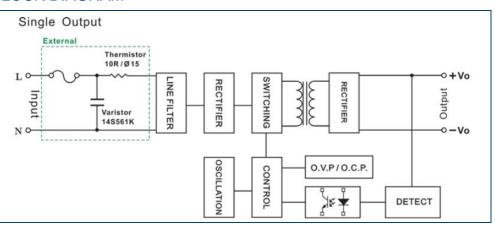
The PSAZC series of AC/DC power supplies provides 2 watts of output power in a 1.12" x 1.02" x 0.67" encapsulated PCB mountable package. This series consists of 3.3,V 5V, 12V, 15V, and 24V single output models with a universal input range of 90-305VAC (120-430VDC). Some features include 3000VAC I/O isolation, -40°C to +80°C operating temperature range, and over power and short circuit protection. All models are RoHS compliant and have UL/cUL, CE, and CB (pending) safety approvals.

MODEL SELECTION TABLE												
Model Number	Input Voltage	Output Voltage	Output Current		Ripple & Noise	Output Power	Efficiency	Maximum Capacitive				
			Min Load	Max Load	Ripple & Noise	Output Fower	Lilloleticy	Load				
PSAZC-3.3S	90~305 VAC (120~430 VDC)	3.3 VDC	0%	600mA	300mVp-p	2W	66%	7000µF				
PSAZC-5S		5 VDC	0%	400mA	300mVp-p	2W	70%	4000µF				
PSAZC-9S		9 VDC	0%	222mA	300mVp-p	2W	73%	1200µF				
PSAZC-12S		12 VDC	0%	167mA	300mVp-p	2W	73%	500µF				
PSAZC-15S		15 VDC	0%	133mA	300mVp-p	2W	73%	350µF				
PSAZC-24S		24 VDC	0%	83mA	300mVp-p	2W	75%	110µF				

### **DERATING**

#### BLOCK DIAGRAM







## SPECIFICATIONS: PSAZC SERIES

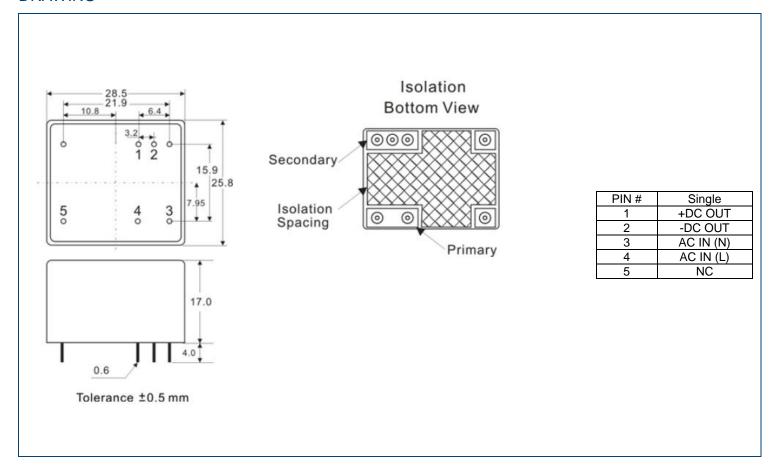
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.

We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Тур	Max	Unit				
INPUT SPECIFICATIONS				'	,				
	AC input voltage range	90		305	VAC				
Input Voltage	DC input voltage range	120		430	VDC				
Input Frequency		47		63	Hz				
Input Current	At 115VAC and full load			75	mA				
input Guirent	At 230VAC and full load			55	55				
Inrush Current (<2ms)	At 115VAC and cold start			30	A				
illusii Cullelii (<21115)	At 230VAC and cold start			50	50				
No Load Input Power				0.3	W				
External Fuse (recommended)	mmended)		3.15A slow blow type						
External Varistor			10S4	471K					
OUTPUT SPECIFICATIONS									
Output Voltage			See	Table					
Voltage Accuracy		-6		+6	%				
Line Regulation	Low Line to High Line	-5		+5	%				
Load Regulation	10% - 100% full load			+6	%				
Output Power			See	Table					
Output Current	See Table								
Minimum Load		0			%				
Ripple & Noise (20MHz BW)	Measured with 0.1µF and 47µF capacitors in parallel		300		mVp-p				
Max Capacitive Load					See Table				
Hold-up Time	At 230VAC	15			ms				
Temperature Coefficient		-0.02		+0.02	%/°C				
PROTECTION									
Short Circuit Protection	Hiccup mode, indefinite (autorecovery)								
Over Power Protection		Hiccup technique, auto-recovery							
GENERAL SPECIFICATIONS			<u> </u>						
Efficiency	At 230VAC	See Table							
Isolation Voltage	Input to Output	3000			VAC				
Leakage Current	< 240VAC			0.25	mA				
ENVIRONMENTAL SPECIFICAT	TIONS								
Operating Temperature	With derating (see derating curve)	-40		+80	°C				
Storage Temperature		-40		+85	°C				
Humidity				95	% RH				
Cooling			Free air c	onvection					
MTBF	25°C (MIL-HDBK-217F)	350,000			hours				
PHYSICAL SPECIFICATIONS									
FILISICAL SELCILICATIONS									
			TE	3D					
Weight Case Material	Plastic resin w	rith fiberglas			JL 94V-0)				
Weight Case Material	Plastic resin w	rith fiberglas	s (Flamm	ability to L					
Weight Case Material Dimensions (L x W x H)	Plastic resin w		s (Flamm	ability to L					
Weight Case Material Dimensions (L x W x H) SAFETY & EMC	Plastic resin w		s (Flamm ches (28.	nability to U					
Weight Case Material Dimensions (L x W x H)	Plastic resin w		ss (Flamm ches (28.9 UL/cUL,	ability to L					



# MECHANICAL DRAWING



# 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 ISO9001-2008 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.

Contact Wall Industries for further information:

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