



Wall Industries, Inc.

PSAPC Series
5 Watt

Single and Dual Outputs
Encapsulated AC/DC Power Supply

FEATURES

- High Efficiency
- 2 Year Warranty
- Regulated Output
- Low Ripple and Noise
- CE, UL, TUV Approval
- Fully Encapsulated Plastic Case
- Switching Power Module for PCB Mounting
- Universal Input Range 90-264VAC, 47-440 Hz



SPECIFICATIONS: PSAPC 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.

INPUT SPECIFICATIONS

Input Voltage Range	90 ~ 264VAC or 120 ~ 370VDC
Input Frequency	47 to 440Hz
Input Current	110mA max @ 115VAC / 70mA max @ 230VAC
Inrush Current (<2ms)	10A max @ 115VAC / 20A max @230VAC
Leakage Current	0.75mA max

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Output Power Range	5 Watts max.
Voltage Accuracy	±2%
Line Regulation (LL – HL)	±0.3% typical
Load Regulation (5% to 100%)	±0.5% typical
Output Current	See Table
Minimum Load	See Table
Ripple	< 0.2% Vout +40mV max (Vp-p)
Noise	< 0.5% Vout +50mV max (Vp-p)
Maximum Capacitive Load	470 - 23,000µF depending on model
Hold-Up Time	15ms min.
Temperature Coefficient	±0.02%/°C

PROTECTION

Over Power Protection	Hiccup technique, auto-recovery
Over Voltage Protection	Zener diode clamp
Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)
Input Fuse Recommendation	1.5A slow blow type

GENERAL SPECIFICATIONS

Switching Frequency	100KHz
Efficiency	See Table
Isolation Voltage (Input to Output)	3000VAC
Isolation Voltage (Input to Field Ground)	1500VAC
Isolation Voltage (Output to Field Ground)	500VAC

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-25°C to +70°C (with derating)
Storage Temperature	-40°C to +85°C
Humidity	95% RH
Cooling	Free air convection
MTBF	> 300,000 hours @ 25°C (MIL-HDBK-217F)

PHYSICAL SPECIFICATIONS

Weight	80g
Case Material	Plastic resin with fiberglass (flammability to UL 94V-0)
Dimensions	2.17(L) x 1.77(W) x 0.81(H) inches (55.0(L) x 45.0(W) x 20.5(H) mm)

SAFETY & EMC

Agency Approvals	UL/cUL, CE, TUV
EMI (Conducted & Radiated Emission)	EN 55022 class B
EMS (Noise Immunity)	EN 50082-1

OUTPUT VOLTAGE / CURRENT RATING CHART

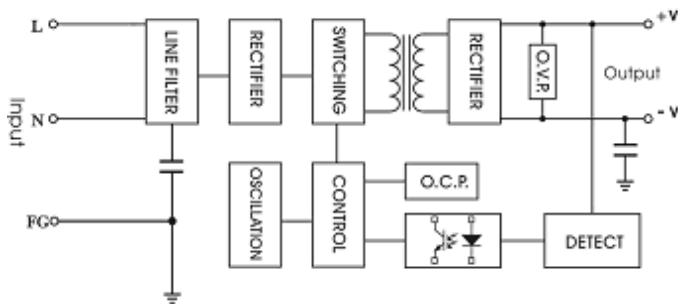
Model Number	Output Voltage	Minimum Load	Output Current	Max Output Power	Efficiency
PSAPC-3.3S	3.3 VDC	4%	1500mA	5W	62%
PSAPC-5S	5 VDC	1%	1000mA	5W	65%
PSAPC-12S	12 VDC	1%	416mA	5W	70%
PSAPC-15S	15 VDC	0%	333mA	5W	70%
PSAPC-24S	24 VDC	0%	200mA	5W	71%
PSAPC-5D	±5 VDC	0%	±500mA	5W	70%
PSAPC-12D	±12 VDC	0%	±200mA	5W	67%
PSAPC-15D	±15 VDC	3%	±160mA	5W	67%

NOTES

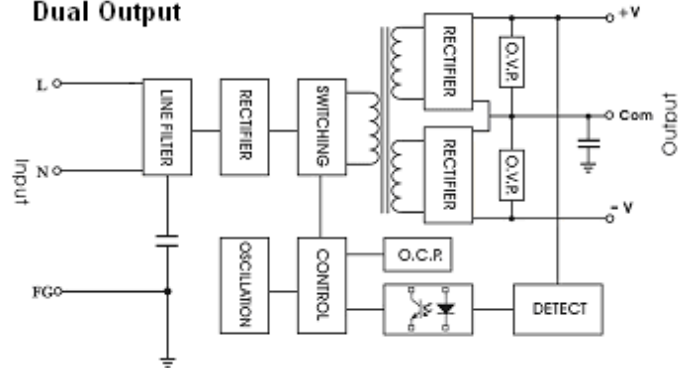
1. Dimensions of the mechanical drawing are shown in millimeters.
2. Weight of the unit is 80 grams.

BLOCK DIAGRAMS

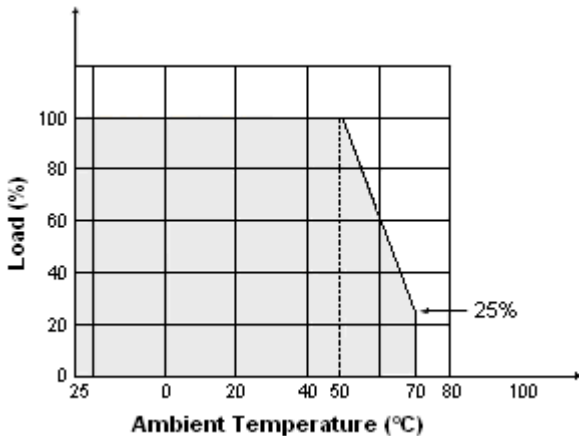
Single Output



Dual Output

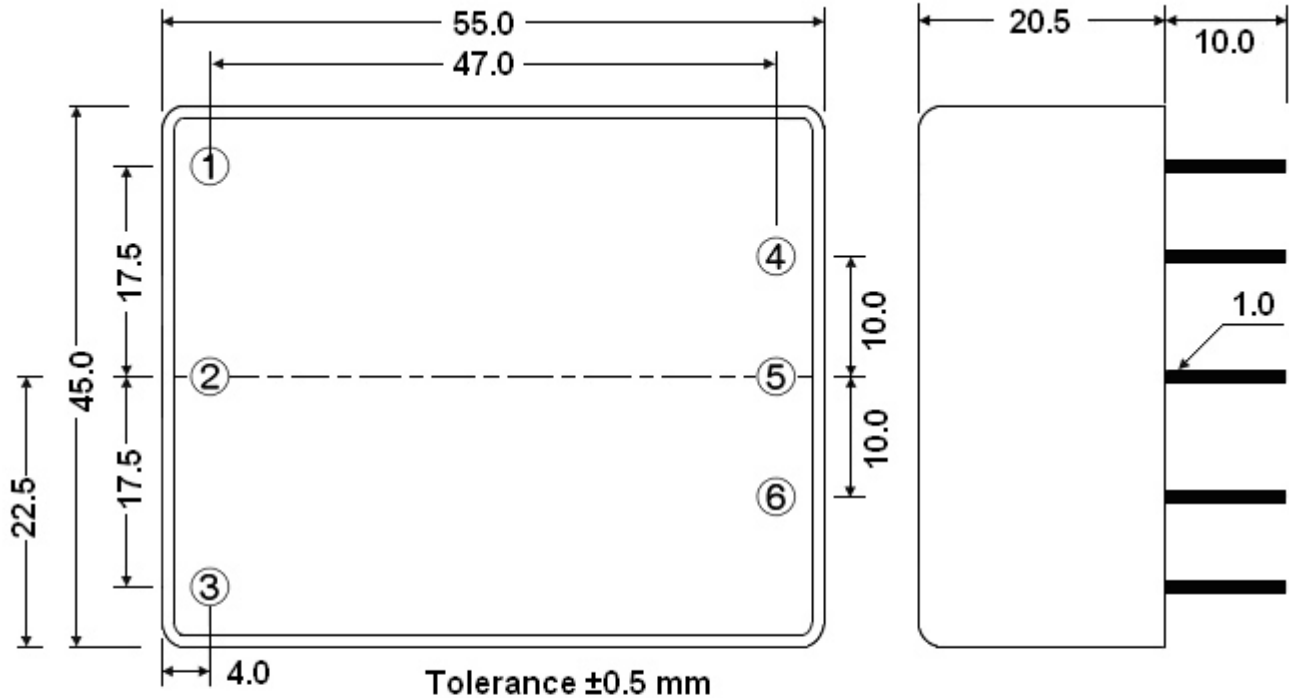


DERATING CURVE



MECHANICAL DRAWING

Unit: mm



PIN CONNECTION		
PIN #	SINGLE	DUAL
1	FG	FG
2	AC IN (N)	AC IN (N)
3	AC IN (L)	AC IN (L)
4	-DC OUT	-DC OUT
5	NO PIN	COMMON
6	+DC OUT	+DC OUT