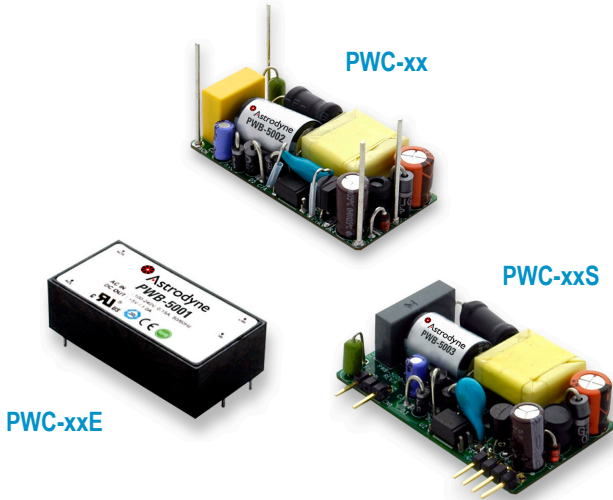




PowerBlock Micro-Miniature 5 Watt Switching Power Supplies

PWC series



- 5 Watts Output Power
- 3.3VDC to 24VDC Single Outputs
- Universal Input
- 3,000VAC Input to Output Isolation
- EN55022 Class B EMI
- Industrial Op. Temp ("E" Versions)



Model Number	Output Voltage	Output Amps	Output Watts	Size (inches)	Efficiency
OPEN FRAME					
PWC-3.3	3.3 VDC	1.25	4.1W	0.91 x 1.91 x 0.63	65%
PWC-5	5 VDC	1	5W	0.91 x 1.91 x 0.63	72%
PWC-12	12 VDC	0.42	5W	0.91 x 1.91 x 0.63	73%
PWC-15	15 VDC	0.34	5W	0.91 x 1.91 x 0.63	75%
PWC-24	24 VDC	0.23	5W	0.91 x 1.91 x 0.63	76%
SIP STYLE OPEN FRAME					
PWC-3.3S	3.3 VDC	1.25	4.1W	1.12 x 1.93 x 0.51	65%
PWC-5S	5 VDC	1	5W	1.12 x 1.93 x 0.51	72%
PWC-12S	12 VDC	0.42	5W	1.12 x 1.93 x 0.51	73%
PWC-15S	15 VDC	0.34	5W	1.12 x 1.93 x 0.51	75%
PWC-24S	24 VDC	0.23	5W	1.12 x 1.93 x 0.51	76%
ENCAPSULATED					
PWC-3.3E	3.3 VDC	1.25	4.1W	1 x 2 x 0.6	65%
PWC-5E	5 VDC	1	5W	1 x 2 x 0.6	72%
PWC-12E	12 VDC	0.42	5W	1 x 2 x 0.6	73%
PWC-15E	15 VDC	0.34	5W	1 x 2 x 0.6	75%
PWC-24E	24 VDC	0.23	5W	1 x 2 x 0.6	76%



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INPUT SPECIFICATIONS

Input Voltage (AC/DC)	90-264VAC/110-340VDC
	Nominal: 100-240VAC
Input Frequency	47-440 Hz, 50-60Hz Nom.
Inrush Current	20A @ 115VAC, typ
	40A @ 200VAC, typ

OUTPUT SPECIFICATIONS

Output Voltage/Current (Note 5)	See Model Chart
Preset Accuracy (Note 8)	+/-1%, typ
Load Regulation (Note 6)	3.3V & 5V: +/-1%, max.
20%-FL	12V, 15V, & 24V: +/-0.5%, max.
Line Regulation (Note 7)	3.3V & 5V: +/-1%, max.
	12V, 15V, & 24V: +/-0.5%, max.
Temperature Coefficient	+/-0.03%/°C (0-50°C, typ.)
Ripple/Noise(20Mhz BW)	150mV Pk-Pk, typ (Notes 1, 2 & 9)
Oversvoltage Protection	Clamp *
Hold Up Time	10mS, typ
Short Circuit Protection	Latching, Recovering *
OverTemp Protection	Latching, Recovering *

GENERAL SPECIFICATIONS

Input-Out Isolation (Note 3)	3000VAC
Output-Ground Isolation	1000VAC
Input-Ground Isolation	2500VAC
Switching Frequency	132 Khz, fixed, typ
Efficiency (@ Full Load)	See Model Chart
Safety	UL60950, EN60950
EMI	EN55022

All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature (Note 4)	
PWC-xx, PWC-xxS	-10 to +50°C FL
PWC-xxE	-25 to +65°C FL
	See Derate Curves
Relative Humidity	0-95%, Non-Condensing
Storage Temperature	-40 to +85°C *

PHYSICAL SPECIFICATIONS

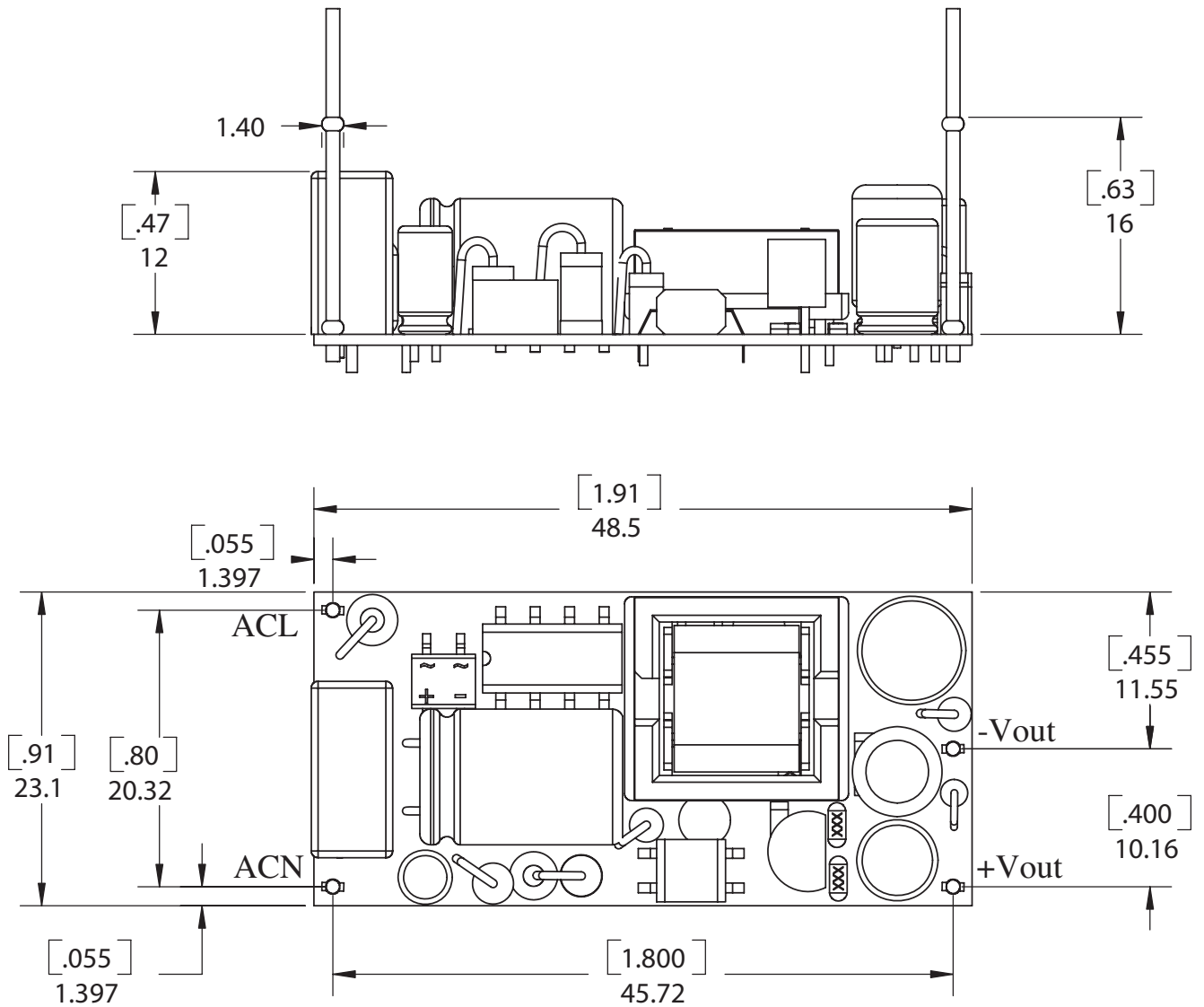
Construction	Open Frame or Encapsulated
Weight	Open Frame: 1.0 oz (28g)
	Encapsulated: 1.5 oz. (42g)

Notes:

1. All measurements should be made directly at the terminals of the power supply
2. Ripple and noise dependent upon output voltage as specified per particular model.
3. Isolation for up to 1 minute duration.
4. Specified for free air convection cooling.
5. Minimum load is not required for proper operation.
6. Load Regulation is measured from 5% to Full Load.
7. Line Regulation measured from High Line to Low Line.
8. Preset Accuracy measured at nominal load, 120VAC input.
9. O/P Noise measured directly at the pins/terminals at nominal load, 0.1uF bypass and 47uF electrolytic, pk-pk @ 20MHz bandwidth.
10. 100% Production Tested

Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

MECHANICAL SPECIFICATIONS - PWC OPEN FRAME



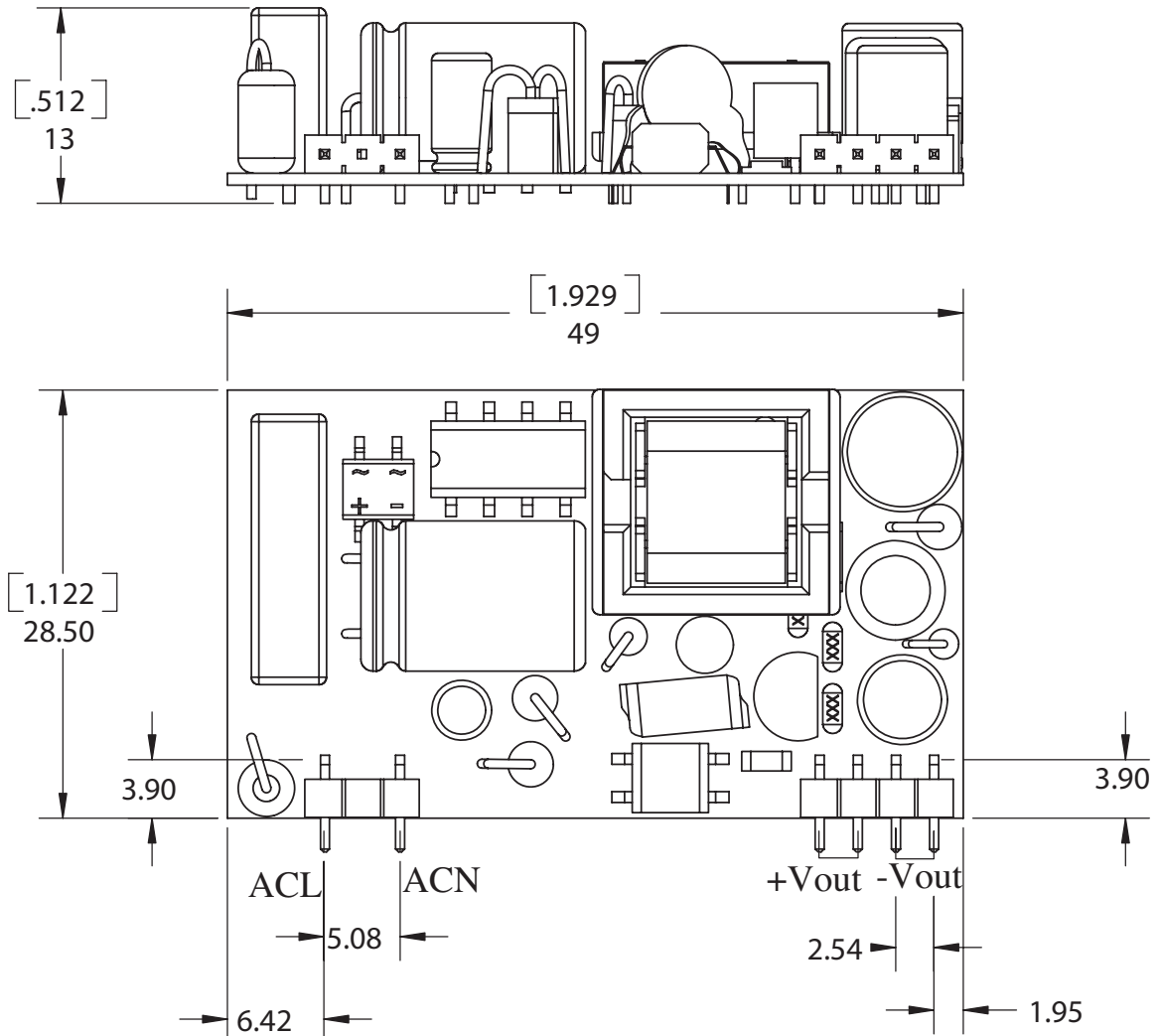
Unit : mm (in)



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PWC series

MECHANICAL SPECIFICATIONS - PWC SIP STYLE



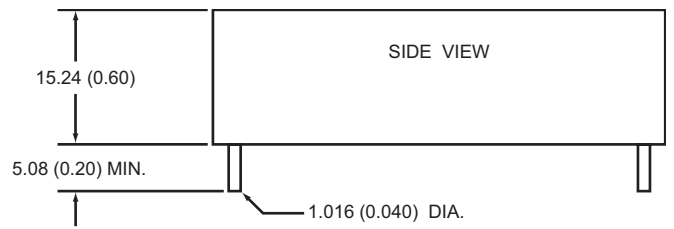
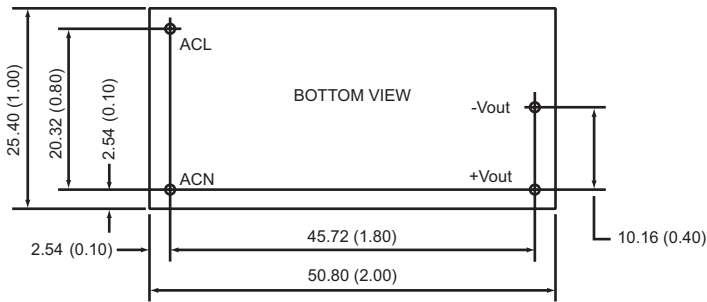
Unit : mm (in)



PowerBlock Micro-Miniature 5 Watt Switching Power Supplies

PWC series

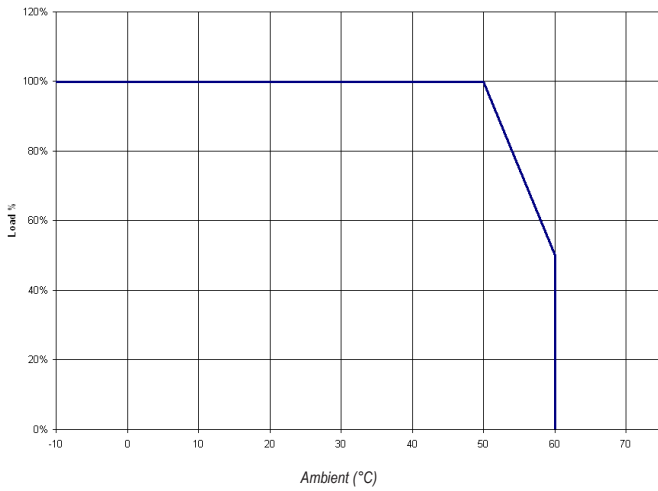
MECHANICAL SPECIFICATIONS - PWC ENCAPSULATED



NOTES: DIMENSIONS ARE IN mm (INCH)

DERATE CURVES

PWC-XX, PWC-XXS



PWC-XXE

