



Size: 2.07in x 1.08in x 0.91in
(52.5mm x 27.4mm x 23mm)

FEATURES

- 85~530VAC (120~750VDC) Input Range
- Low Leakage Current
- Low Standby Power
- RoHS & REACH Compliant
- Over Voltage, Over Load, and Short Circuit Protection
- 4000VAC Reinforced Insulation
- EN/UL 61010-1 and IEC/EN/UL 62368-1 (OVC III) Safety Approvals (Pending)

APPLICATIONS

- Smart Meter
- Automation
- LED
- 3 Phase Voltage
- Datacom
- Industrial
- IPC
- PV

DESCRIPTION

The PSLRB6 series of AC/DC power supplies offers up to 6 watts of output power in a compact 2.07" x 1.08" x 0.91" through hole package. This series consists of single output models with a wide 85~530VAC (120~750VDC) input voltage range. Each model features low leakage current, low standby power, and over voltage, over load, and short circuit protection. The PSLRB6 series is RoHS and REACH compliant and has EN/UL 61010-1 and IEC/EN/UL 62368-1 (OVC III) pending safety approvals.

MODEL SELECTION TABLE

Model Number	Input Voltage Range	Output Voltage	Output Current	Ripple & Noise	No Load Input Current	Output Power	Maximum Capacitive Load	Efficiency
PSLRB6-5S	85~530VAC (120~750VDC)	5VDC	1200mA	50mVp-p	400mW	6W	2400µF	69%
PSLRB6-12S		12VDC	500mA	50mVp-p	400mW	6W	420µF	73%
PSLRB6-15S		15VDC	400mA	50mVp-p	400mW	6W	270µF	74%
PSLRB6-24S		24VDC	250mA	50mVp-p	400mW	6W	100µF	75%

SPECIFICATIONS

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	Typ	Max	Unit
INPUT SPECIFICATIONS					
Input Voltage Range	AC Input	85		530	VAC
	DC Input	120		750	VDC
Input Frequency	AC Input	47		63	Hz
Input Current	100VAC and Full Load			150	mA
	480VAC and Full Load			60	
No Load Input power	480VAC		400		mW
Inrush Current	480VAC		20		A
Input Protection	Internal	Fusible Resistor 8.2Ω			
Leakage Current	480VAC			100	µA
OUTPUT SPECIFICATIONS					
Output Voltage		See Table			
Initial Set Voltage Accuracy	230VAC ad Full Load	-1.0		+1.0	%
Line Regulation	Low Line to High Line at Full Load	-0.2		+0.2	%
Load Regulation	No Load to Full Load	-0.5		+0.5	%
Output Power				6	W
Output Current		See Table			
Minimum Load		0			%
Maximum Capacitive Load		See Table			
Ripple & Noise (20MHz bandwidth)	Measured by 20MHz bandwidth with a 1µF/50V 1206 X7R MLCC		50		mVp-p
Transient Response	Load step from 75~100% change at 0.25A/µs	Peak Deviation		3	%Vout
		Recovery Time		500	µs
Start-Up Time				25	mS
Rise Time				20	mS
Hold Up Time	480VAC and Full Load		180		mS
Temperature Coefficient		-0.02		+0.02	%/°C
PROTECTION					
Short Circuit Protection		Continuous, Automatic Recovery			
Over Load Protection	% of Iout rated; Hiccup Mode		220		%
Over Voltage Protection	% of Vout (nom); Latch mode	115		140	%

SPECIFICATIONS

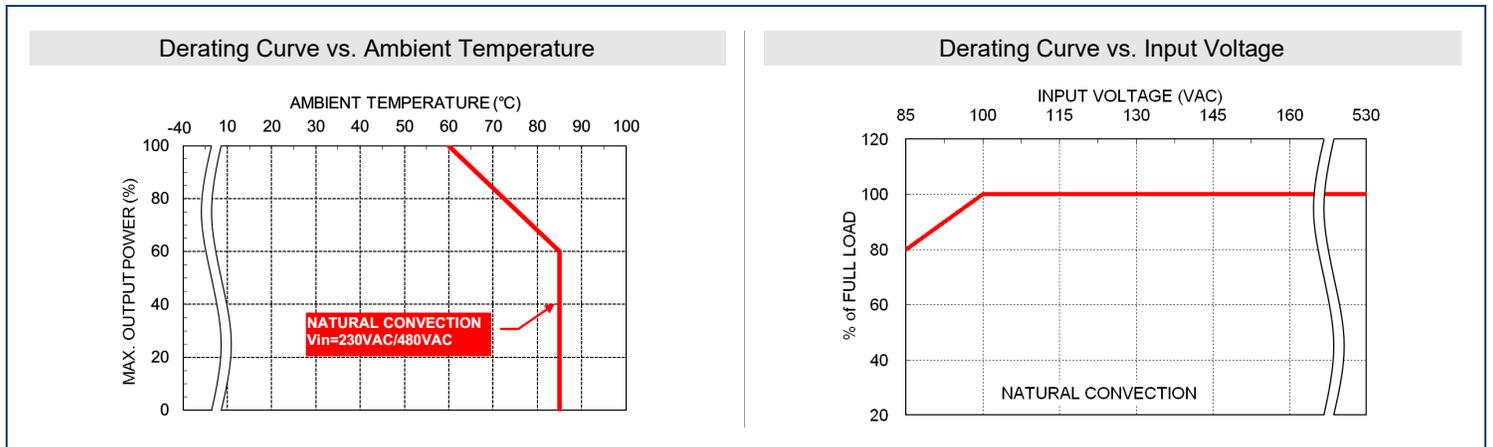
All specifications are typical at 25°C, 480VAC Input Voltage, and Full Load unless otherwise noted.
We reserve the right to change specifications based on technological advances.

SPECIFICATION	TEST CONDITIONS	Min	Typ	Max	Unit
ENVIRONMENTAL SPECIFICATIONS					
Operating Ambient Temperature	Natural Convection, with Derating	-40		+85	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-Condensing	5		95	%RH
Shock		IEC60068-2-27			
Vibration		IEC6006-2-6			
Operating Altitude	EN/UL 61010-1 IEC/EN/UL 62368-1			4000 5000	m
MTBF	MIL-HDBK-217F, Full Load		1,841,000		Hours
GENERAL SPECIFICATIONS					
Efficiency		See Table			
Switching Frequency	480VAC		65		kHz
Isolation Voltage	1 minute (reinforced Insulation), input to output	4000			VAC
Isolation Resistance	1000VDC	1			GΩ
PHYSICAL SPECIFICATIONS					
Weight		2.12oz (60g)			
Dimensions (L x W x H)		2.07in x 1.08in x 0.91in (52.5mm x 27.4mm x 23mm)			
Potting Material		Potting compound (UL94 V-0)			
SAFETY CHARACTERISTICS					
Safety Approvals (Pending)		EN/UL 61010-1 IEC/EN/UL 62368-1 (OVC III)			
EMI	EN55032 and FCC Part 15		Conducted		Class B
			Radiated		Class B
Harmonic Currents	EN61000-6-2	Full Load			Class A
Voltage Flicker	EN61000-3-3				
EMS	EN55024				
ESD	EN61000-4-2				Perf. Criteria A
Radiated Immunity	EN61000-4-3				Perf. Criteria A
Fast Transient	EN61000-4-4				Perf. Criteria A
Surge	EN61000-4-5				Perf. Criteria A
Conducted Immunity	EN61000-4-6				Perf. Criteria A
Power Frequency Magnetic Field	EN61000-4-8				Perf. Criteria A
Dip and Interruptions	EN61000-4-11				

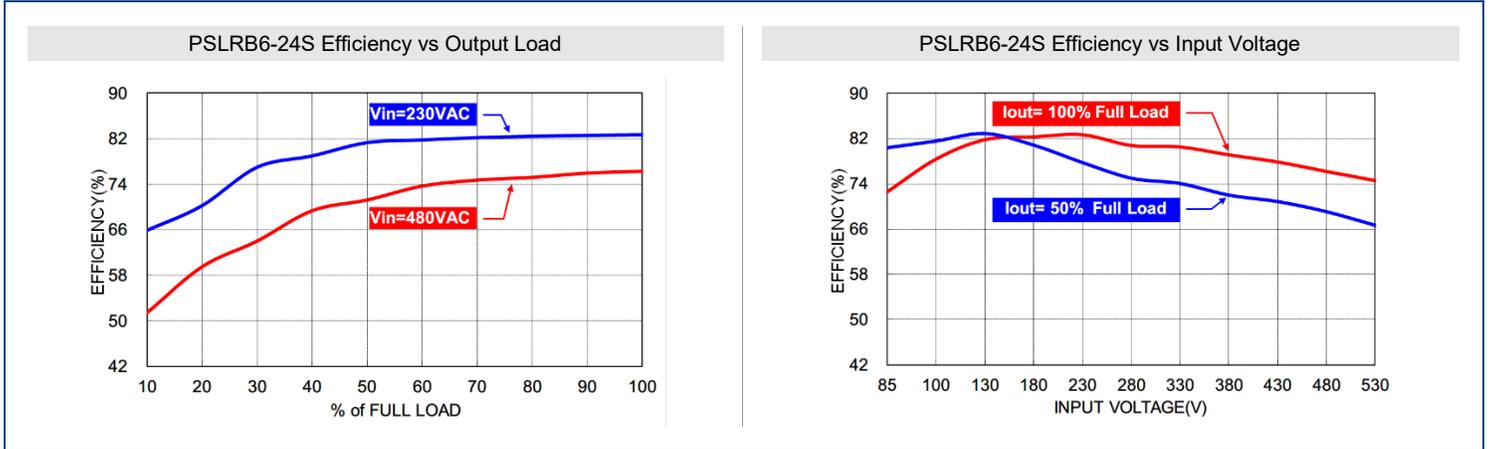
NOTES

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

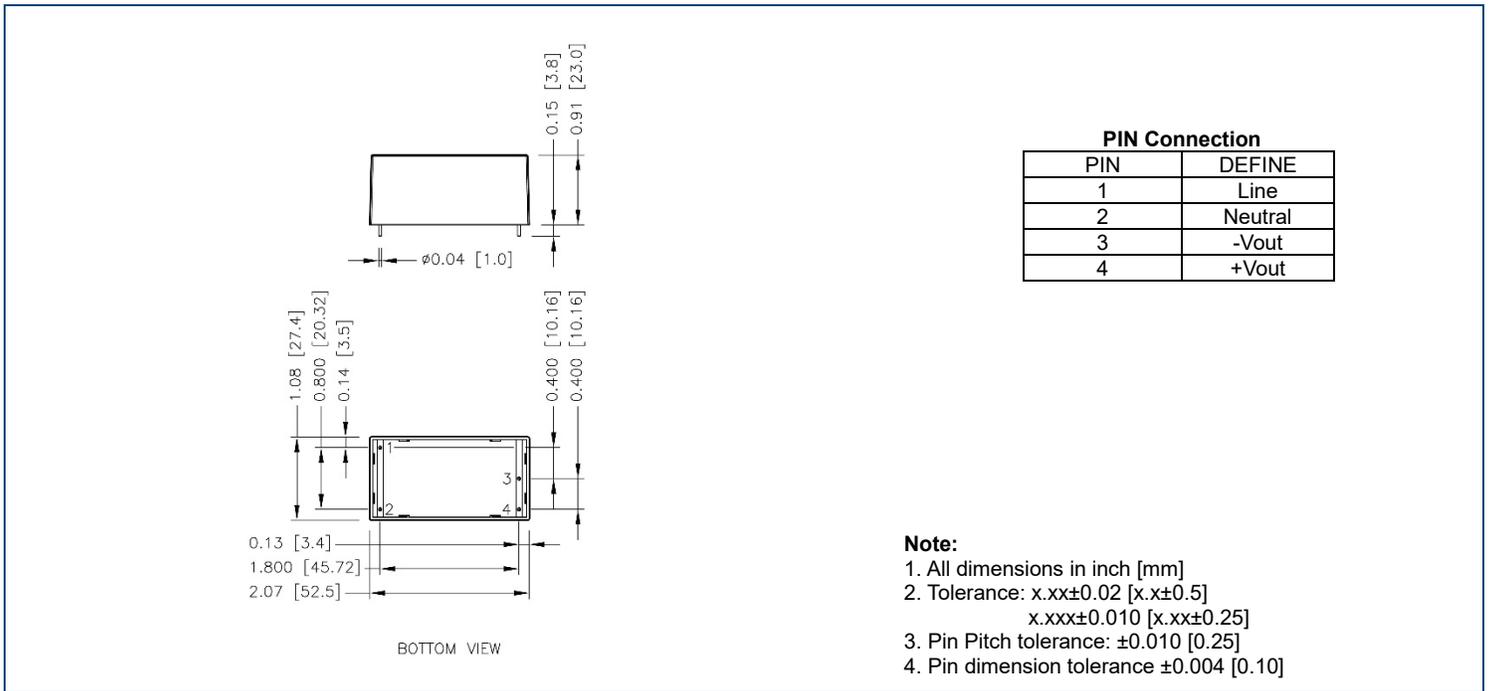
DERATING CURVES



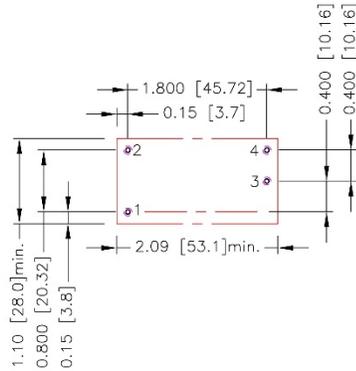
EFFICIENCY GRAPHS



MECHANICAL DRAWINGS



RECOMMENDED PAD LAYOUT



*There should be at least 8mm distance between primary and secondary circuit
**For further information, please contact factory.

All dimensions in inch[mm]
Pad size(lead free recommended)
Through hole 1.2.3.4: $\Phi 0.051$ [1.30]
Top view pad 1.2.3.4: $\Phi 0.064$ [1.63]
Bottom view pad 1.2.3.4: $\Phi 0.102$ [2.60]

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 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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