

15 AND 30 WATTS - SIW SERIES

Ultra-Wide Input, Triple Output Protection

FEATURES

- Ultra-Wide Input Voltage Range (4:1)
- LC Network Input Filter
- Six-Sided Shielding
- 24VDC Nominal Input - 50VDC Surge,
48VDC Nominal Input - 100VDC Surge
- Continuous Current Limiting Short Circuit Protection
- No Derating to +85°C Case Temperature
- Industry Standard Package and Pin Out

THE SIW SERIES FROM WALL INDUSTRIES

The SIW Series operates over an ultra wide input range of 9-36VDC or 20-75VDC and delivers up to 30 watts in a 2.56" x 3.0" x 0.84" package. Other key specifications of the SIW Series include LC Network input filter for low reflected ripple, efficiency to 85%, over voltage protection, remote on/off and operation to +85°C (case) with no derating. Metallic case provides six-sided shielding.

**SPECIFICATIONS: SIW SERIES**

All specifications apply @ +25 C ambient unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltages.....9-36, 20-75VDC
 Nominal Input.....24, 48VDC
 Input Filter.....LC Network
 Remote On/Off Control.....Open collector TTL

OUTPUT SPECIFICATIONS

Output Current.....see table
 Output Voltage Tolerance
 Primary Outputs.....±1%
 Auxiliary Outputs.....±3%
 Output Trim.....±10%, singles outputs
 Line Regulation.....See note 4
 Load Regulation.....See note 5
 Ripple/Noise (20MHz BW).....75mV p-p
 Short Circuit Protection.....Current Limiting
 Over Voltage Protection.....see table

GENERAL SPECIFICATIONS

Efficiency: at full load.....up to 85%
 Isolation Voltage, input to output.....500VDC
 Isolation Resistance, input to output.....500MOhms
 Switching Frequency.....100kHz typical

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature (case).....-25 to +85°C
 Storage Temperature.....-55 to +100°C
 Humidity (non-condensing).....20% - 95% R.H.

PHYSICAL SPECIFICATIONS

Shielding.....Six-sided
 Weight.....7.5 oz.
 Case Material.....Black coated metal
with non-conductive baseplate

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

Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)			Over Voltage Protection (VDC)	Model Number 15 Watts	Model Number 25 Watts	Model Number 30 Watts	
		15W	25W	30W					
9 - 36	3.3		7575		5.1		SIW24S3.3-25		
	5	3000		6000	6.8	SIW24S5-15		SIW24S5-30	
	12	1250		2500	15	SIW24S12-15		SIW24S12-30	
	15	1000		2000	18	SIW24S15-15		SIW24S15-30	
	24			1250	27			SIW24S24-30	
	48			630	51			SIW24S48-30	
	±5	1500		3000	6.8	SIW24D5-15		SIW24D5-30	
	±12	625		1250	15	SIW24D12-15		SIW24D12-30	
	±15	500		1000	18	SIW24D15-15		SIW24D15-30	
	+5/±12			4000/420	6.8/15			SIW24T12-30	
	+5/±15			4000/340	6.8/18			SIW24T15-30	
	20-75	3.3		7575		5.1		SIW48S3.3-25	
		5	3000		6000	6.8	SIW48S5-15		SIW48S5-30
12		1250		2500	15	SIW48S12-15		SIW48S12-30	
15		1000		2000	18	SIW48S15-15		SIW48S15-30	
24				1250	27			SIW48S24-30	
48				630	51			SIW48S48-30	
±5		1500		3000	6.8	SIW48D5-15		SIW48D5-30	
±12		625		1250	15	SIW48D12-15		SIW48D12-30	
±15		500		1000	18	SIW48D15-15		SIW48D15-30	
+5/±12				4000/420	6.8/15			SIW48T12-30	
+5/±15				4000/340	6.8/18			SIW48T15-30	

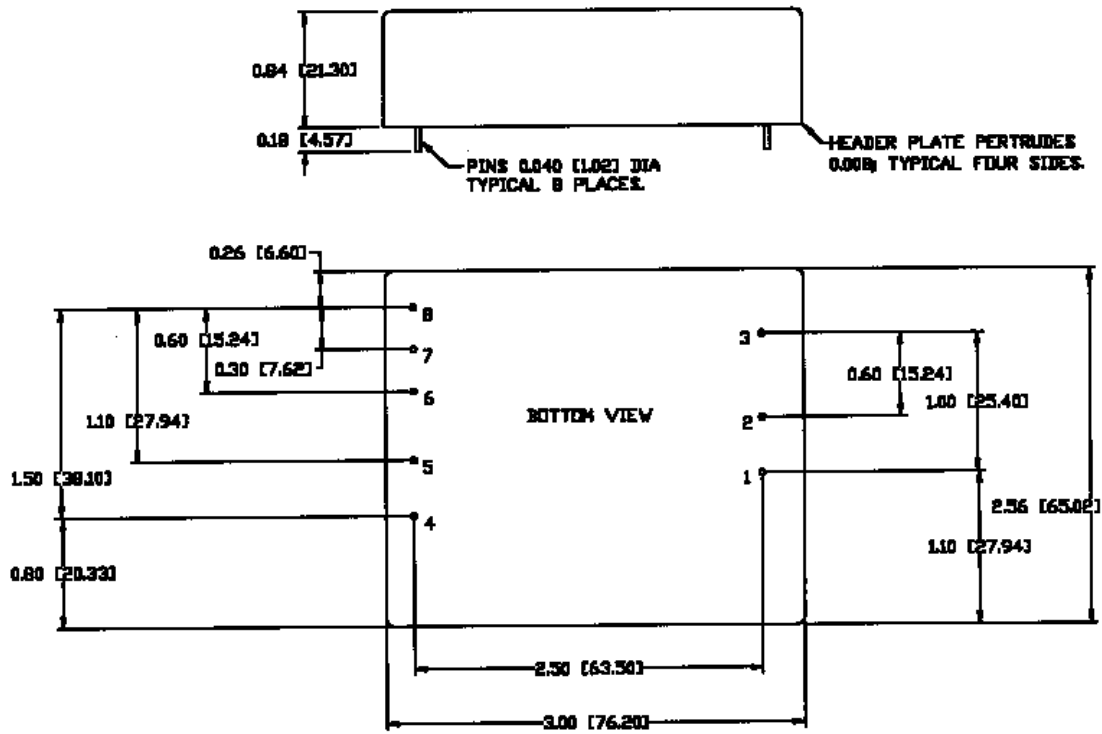
PIN CONNECTIONS

	Single*	Dual	Triple
1	-Vin	- Vin	- Vin
2	+Vin	+Vin	+Vin
3	Remote	Remote	Remote
4	-Vout	N/C	N/C
5	+Vout	N/C	+5 Out
6	-Sense*	-Vout	-Vout
7	Output trim	Common	Common
8	+ Sense*	+Vout	+Vout

NOTES:

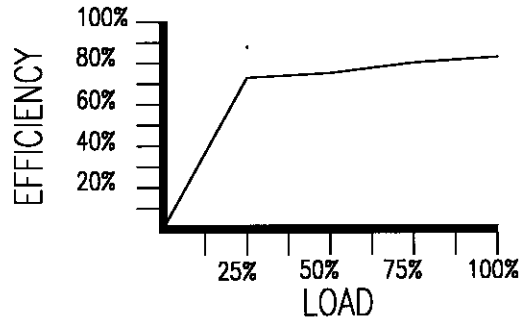
* Important: 30 Watt singles, "+ Sense Out" pin must connect to "+ Vout" pin; "- Sense Out" pin must connect to "- Vout" pin
 ** 15 Watt singles, pin 6 and 8 are omitted, internally connected

1. All case and pin to case dimensions reference only unless otherwise noted.
2. PC pins: 0.04" dia x 0.18" long (min.); typical 8 places
3. Pin to pin tolerance ±0.01". Pin diameter tolerance ±0.005"
4. Singles/duals/triples ±0.5% LL-HL
5. Singles: ±1% 25 - 100% load
 Duals 5V: ±3% 25 - 100% load
 Duals 12&15V: ±1% 25 - 100% load
 Triples: ±3% 25 - 100% load, 20% min load required on Main.
6. Pins may be omitted on N/C pin functions, consult factory
7. Significant capacitive load on output may inhibit start-up and operation, consult factory.
8. All DC/DC converters should be externally fused on the front end for protection.
9. Limited trim capability on 48VDC output models, consult factory.



DIMS. IN [MM]

EFFICIENCY VS LOAD CURVE



DERATING CURVE

