

## SWX Series



- Low Profile (8 mm max)
- Wide Operating Temperature
- Remote On/Off
- Parallel Operation
- High Reliability
- International Safety Approvals

## Specification

### Input

Input Voltage Range	• 18-36 VDC (for SWX15 & SWX30) 36-76 VDC
Start Up Voltage	• 16-18 VDC for 24 Vnom 32-36 VDC for 48 Vnom
Hysteresis Voltage	• 1 VDC min for 24 Vnom 2 VDC min for 48 Vnom

### Output

Output Voltage	• See table
Minimum Load	• No minimum load required
Start Up Delay	• 200 ms max (Vnom, Io 100%)
Initial Set Accuracy	• Vnom +2/-1% measured at Vnom in 100% load and +25 °C
Total Regulation	• +5/-3%
Output Ripple	• 25 mV max pk-pk, 1.2 to 5 V models 120 mV max 12 & 15 V models
Ripple & Noise	• 50 mV pk-pk, 1.2 to 5 V models 150 mV max 12 & 15 V models
Overvoltage Protection	• 120-140% of Vnom recycle input to reset
Low Voltage Protection	• Works 200 ms after an overload when the output voltage drops to 90% of rating
Remote On/Off	• Standard
Parallel Operation	• It is possible to parallel a maximum of 10 units

### General

Efficiency	• See table
Isolation Voltage	• Input to Output 1500 VDC
Alarms	• If over or under voltage protection is activated the ALM pin becomes the same level as the -Vin pin

### Environmental

Operating Temperature	• -40 °C to +85 °C (for derating curves - contact sales for application note)
Storage Temperature	• -40 °C to +100 °C
Operating Humidity	• 20-90%, RH non-condensing
Shock	• 20 G, 11 ms once each X, Y & Z axis
Vibration	• 5 G 10-55 Hz 3 min period, 60 min each along X, Y & Z axis

### EMC & Safety

Emissions	• EN55022, level A conducted external filter required EN55022, level A radiated (contact sales for application note)
ESD Immunity	• EN61000-4-2, level 4
Radiated Immunity	• EN61000-4-3, level 3
EFT/Burst	• EN61000-4-4, level 4
Surge	• EN61000-4-5, level 3
Safety Approvals	• EN60950, UL60950, C-UL

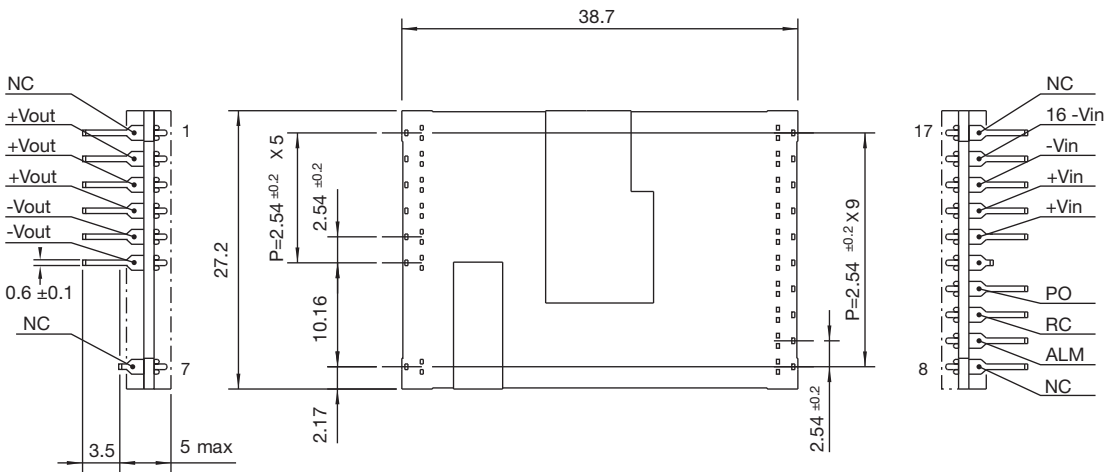
## Models and Ratings

Input Voltage	Output Power	Output Voltage	Output Current	Efficiency <sup>(1)</sup>	Model Number <sup>(2)</sup>
36-72 VDC	4.20 W	1.2 V	3.50 A	80%	SWX1048S1V2
	5.25 W	1.5 V	3.50 A	82%	SWX1048S1V5
	5.40 W	1.8 V	3.00 A	84%	SWX1048S1V8
	6.00 W	2.0 V	3.00 A	85%	SWX1048S2V0
	7.50 W	2.5 V	3.00 A	86%	SWX1048S2V5
	9.90 W	3.3 V	3.00 A	88%	SWX1048S3V3
	10.00 W	5.0 V	2.00 A	89%	SWX1048S5V0
	10.80 W	12.0 V	0.90 A	88%	SWX1048S12
10.50 W	15.0 V	0.70 A	88%	SWX1048S15	
18-36 VDC	7.80 W	1.5 V	5.20 A	82%	SWX1524S1V5
	8.10 W	1.8 V	4.50 A	85%	SWX1524S1V8
	11.25 W	2.5 V	4.50 A	87%	SWX1524S2V5
	14.85 W	3.3 V	4.50 A	89%	SWX1524S3V3
	15.00 W	5.0 V	3.00 A	90%	SWX1524S5V0
	15.00 W	12.0 V	1.25 A	89%	SWX1524S12
	15.00 W	15.0 V	1.00 A	89%	SWX1524S15
36-76 VDC	6.24 W	1.2 V	5.20 A	80%	SWX1548S1V2
	7.80 W	1.5 V	5.20 A	82%	SWX1548S1V5
	8.10 W	1.8 V	4.50 A	85%	SWX1548S1V8
	9.00 W	2.0 V	4.50 A	86%	SWX1548S2V0
	11.25 W	2.5 V	4.50 A	87%	SWX1548S2V5
	14.85 W	3.3 V	4.50 A	89%	SWX1548S3V3
	15.00 W	5.0 V	3.00 A	90%	SWX1548S5V0
	15.00 W	12.0 V	1.25 A	89%	SWX1548S12
15.00 W	15.0 V	1.00 A	89%	SWX1548S15	
36-76 VDC	13.50 W	1.5 V	9.00 A	86%	SWX2048S1V5
	14.40 W	1.8 V	8.00 A	85%	SWX2048S1V8
	17.50 W	2.5 V	7.00 A	88%	SWX2048S2V5
	19.80 W	3.3 V	6.00 A	90%	SWX2048S3V3
	20.00 W	5.0 V	4.00 A	90%	SWX2048S5V0
18-36 VDC	12.50 W	1.2 V	10.40 A	81%	SWX3024S1V2
	15.60 W	1.5 V	10.40 A	83%	SWX3024S1V5
	16.20 W	1.8 V	9.00 A	86%	SWX3024S1V8
	22.50 W	2.5 V	9.00 A	88%	SWX3024S2V5
	29.70 W	3.3 V	9.00 A	90%	SWX3024S3V3
	30.00 W	5.0 V	6.00 A	90%	SWX3024S5V0
	30.00 W	12.0 V	2.50 A	89%	SWX3024S12
	30.00 W	15.0 V	2.00 A	89%	SWX3024S15
36-76 VDC	12.50 W	1.2 V	10.40 A	81%	SWX3048S1V2
	15.60 W	1.5 V	10.40 A	83%	SWX3048S1V5
	16.20 W	1.8 V	9.00 A	86%	SWX3048S1V8
	18.00 W	2.0 V	9.00 A	87%	SWX3048S2V0
	22.50 W	2.5 V	9.00 A	88%	SWX3048S2V5
	29.70 W	3.3 V	9.00 A	90%	SWX3048S3V3
	30.00 W	5.0 V	6.00 A	90%	SWX3048S5V0
	30.00 W	10.0 V	3.00 A	90%	SWX3048S10
	30.00 W	12.0 V	2.50 A	89%	SWX3048S12
	30.00 W	15.0 V	2.00 A	89%	SWX3048S15

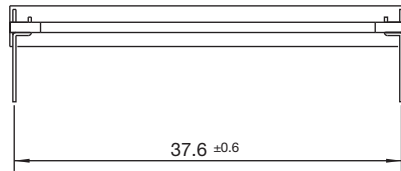
### Notes

1. Measured at Vnom input, rated load and +25 °C.
2. For SWX10 and SWX15 models, a 1 A fast blow fuse and 10 µF capacitor are recommended across the input pins.  
For SWX30 models, a 2 A fast blow fuse and 20 µF capacitor are recommended across the input pins.
3. For surface mount package add suffix '-SMB' to model number.
4. Contact sales for full application notes or visit [www.xppower.com](http://www.xppower.com).

10, 15 & 20 Watt Model - Through Hole

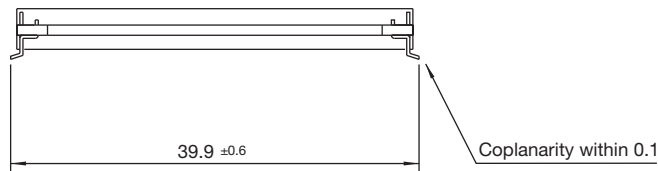
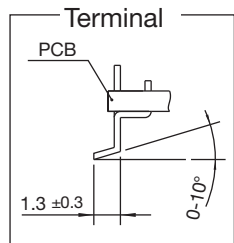
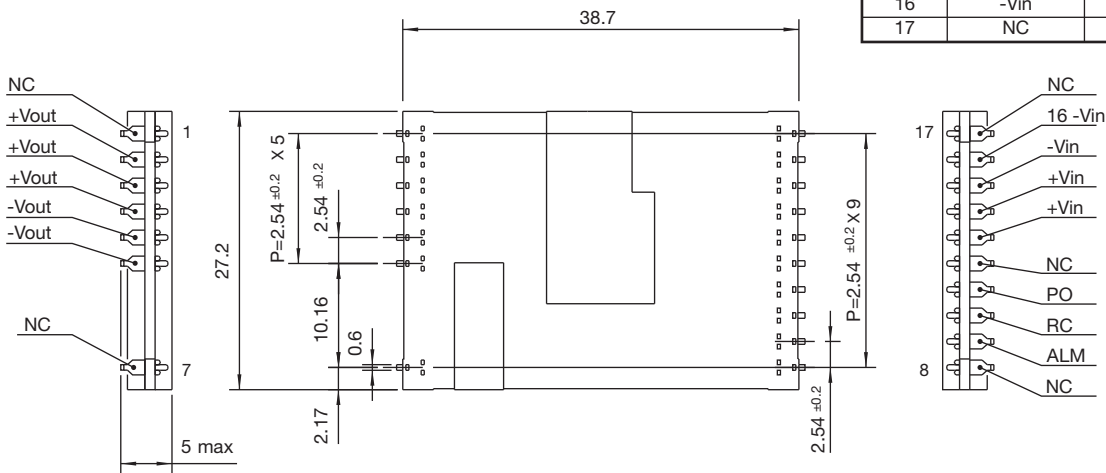


Dimensions in mm  
Tolerance : ±0.5  
Weight : 12g



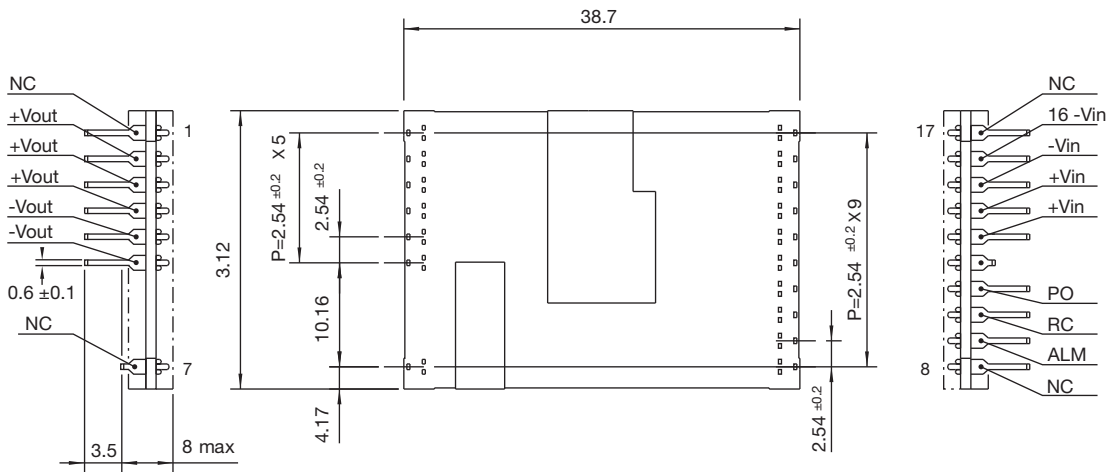
Pin	Pin Name	Function
1	NC	Position for SM Adhesive
2	+Vout	+DC Output
3	+Vout	+DC Output
4	+Vout	+DC Output
5	-Vout	-DC Output
6	-Vout	-DC Output
7	NC	Position for SM Adhesive
8	NC	Position for SM Adhesive
9	ALM	Alarm
10	RC	Remote On/Off
11	PO	Start In/Out
12	NC	-
13	+Vin	+DC Input
14	+Vin	+DC Input
15	-Vin	-DC Input
16	-Vin	-DC Input
17	NC	Position for SM Adhesive

10, 15 & 20 Watt Model - Surface Mount

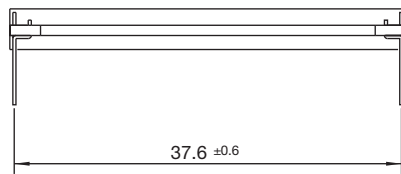


Dimensions in mm  
Tolerance : ±0.5  
Weight : 12g

30 Watt Model - Through Hole

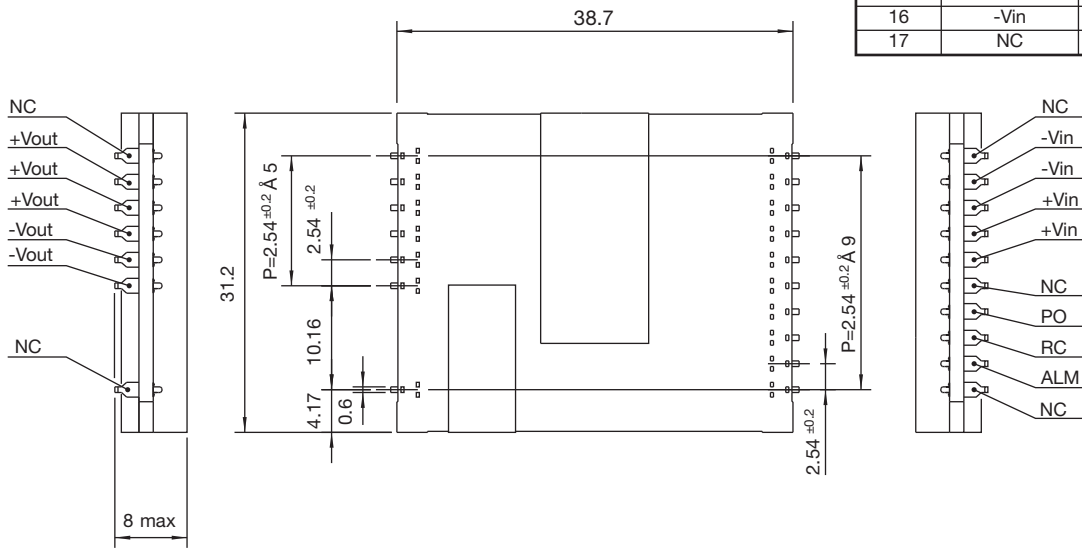


Dimensions in mm  
Tolerance : ±0.5  
Weight : 20g

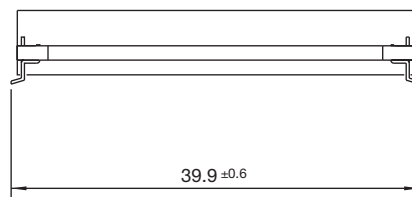
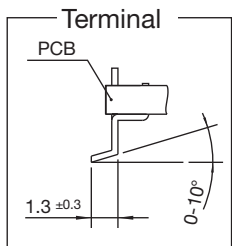


Pin	Pin Name	Function
1	NC	Position for SM Adhesive
2	+Vout	+DC Output
3	+Vout	+DC Output
4	+Vout	+DC Output
5	-Vout	-DC Output
6	-Vout	-DC Output
7	NC	Position for SM Adhesive
8	NC	Position for SM Adhesive
9	ALM	Alarm
10	RC	Remote On/Off
11	PO	Start In/Out
12	NC	-
13	+Vin	+DC Input
14	+Vin	+DC Input
15	-Vin	-DC Input
16	-Vin	-DC Input
17	NC	Position for SM Adhesive

30 Watt Model - Surface Mount



Dimensions in mm  
Tolerance : ±0.5  
Weight : 20g



Coplanarity within 0.1