

## KEY FEATURES

- Power Module for PCB Mountable
- SMALL SIZE :1.0 x 1.0 x 0.433 Inches
- HIGH EFFICIENCY UP TO 89%
- 2:1 Input Range and 1600 VDC Isolation
- Remote ON/OFF Control (Optional)
- Operating Temperature: -40°C...+85°C (with derating)
- 2 Years Product Warranty



## ELECTRICAL SPECIFICATIONS

Model No.	SW20-12-3.3S	SW20-12-5S	SW20-12-12S	SW20-12-15S
Input Voltage (V.DC.)	12V (9-18V)	12V (9-18V)	12V (9-18V)	12V (9-18V)
Output Voltage (V.DC.)	3.3V / 4500mA	5V / 4000mA	12V / 1660mA	15V / 1330mA
Efficiency	85%	89%	88%	88%
Capacitor Load (max)	2000µF	2000µF	470µF	330µF

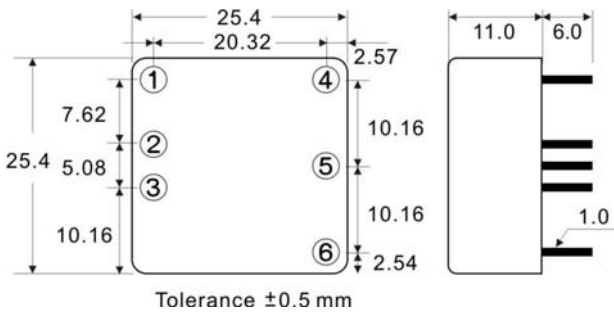
Model No.	SW20-24-3.3S	SW20-24-5S	SW20-24-12S	SW20-24-15S
Input Voltage (V.DC.)	24V (18-36V)	24V (18-36V)	24V (18-36V)	24V (18-36V)
Output Voltage (V.DC.)	3.3V / 4500mA	5V / 4000mA	12V / 1660mA	15V / 1330mA
Efficiency	86%	89%	89%	89%
Capacitor Load (max)	2000µF	2000µF	470µF	330µF

Model No.	SW20-48-3.3S	SW20-48-5S	SW20-48-12S	SW20-48-15S
Input Voltage (V.DC.)	48V (36-75V)	48V (36-75V)	48V (36-75V)	48V (36-75V)
Output Voltage (V.DC.)	3.3V / 4500mA	5V / 4000mA	12V / 1660mA	15V / 1330mA
Efficiency	84%	88%	89%	89%
Capacitor Load (max)	2000µF	2000µF	470µF	330µF

Model No.	( Single Output )	SW20-12-3.3S SW20-24-3.3S SW20-48-3.3S	SW20-12-5S SW20-24-5S SW20-48-5S	SW20-12-12S SW20-24-12S SW20-48-12S	SW20-12-15S SW20-24-15S SW20-48-15S
Max Output Wattage (W)		14.85W	20W	20W	20W
Input	Input Filter	L-C type			
Output	Voltage (V.DC.)	3.3	5	12	15
	Voltage Accuracy	±2%			
	Current (mA) max	4500	4000	1660	1330
	Line Regulation (LL-HL) (typ.)	±0.5%			
	Load Regulation (10-100%) (typ.)	±1%			
	Ripple	75 mV max.		100mV max.	
	Noise	100 mV max.		125mV max.	
Protection	Switching Frequency	12V & 15V Output: 300KHz		3.3V&5V Outpu: 450KHz	
	Over Power Protection	Works over 120% of rating and recovers automatically.			
	Over Voltage Protection	Zener diode clamp			
Isolation	Short Circuit Protection	Current limit, auto-recovery			
	Voltage	1600 VDC.			
	Resistance	10 <sup>8</sup> ohms			
Environment	Capacitance	1000 pF			
	Operating Temperature	-40°C...+85°C (with derating)			
	Storage Temperature	-55°C...+105°C			
	Case Temperature	+105°C max.			
	Temperature Coefficient	±0.02% Per°C			
	Humidity	95% RH			
Physical	MTBF	>800,000 h @ 25°C (MIL-HDBK-217F)			
	Dimension (L x W x H)	1.0 x 1.0 x 0.433 Inches ( 25.4 x 25.4 x 11 mm ) Tolerance ±0.5 mm			
	Case Material	six-side shielded Aluminum with Non-Conductive base, Black Anodize			
	Weight	15g			
	Cooling Method	Free-air convection			

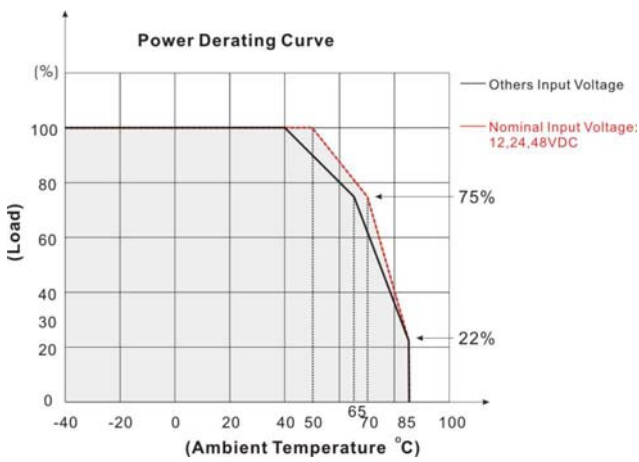
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

**MECHANICAL DIMENSION ( Top View )**

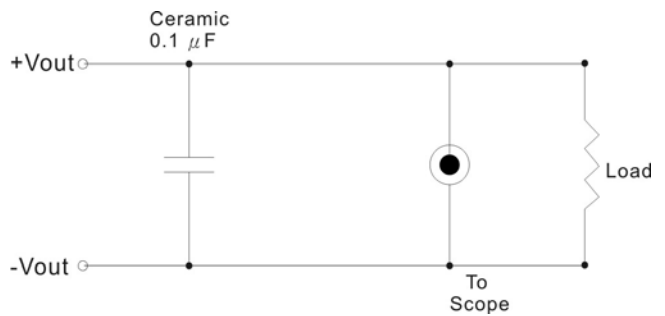


PIN#	Single
1	ON / OFF CTL (Optional)
2	-DC IN
3	+DC IN
4	-DC OUT
5	NO PIN
6	+DC OUT

**DERATING**



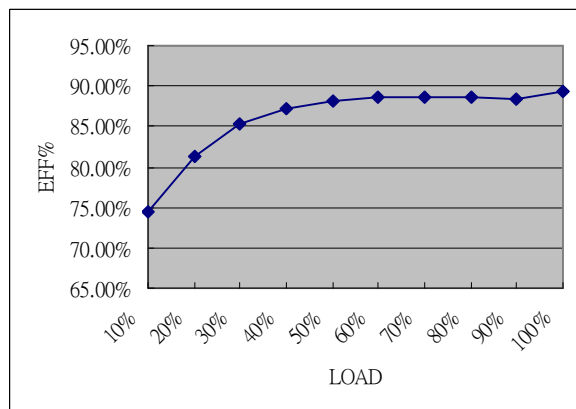
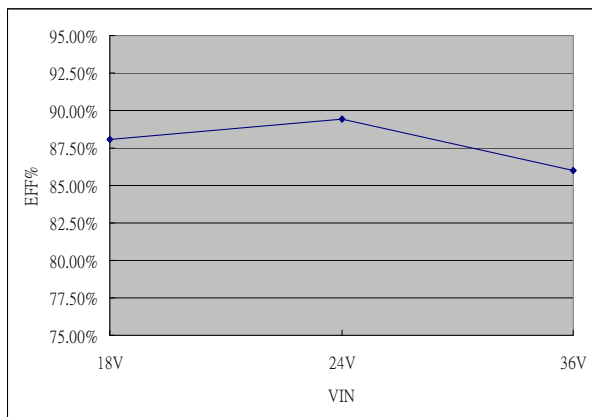
**OUTPUT NOISE**



**SW20-24-5S Efficiency**

Load=100%(4A)

VIN=24 VDC



**SCREW TERMINAL**

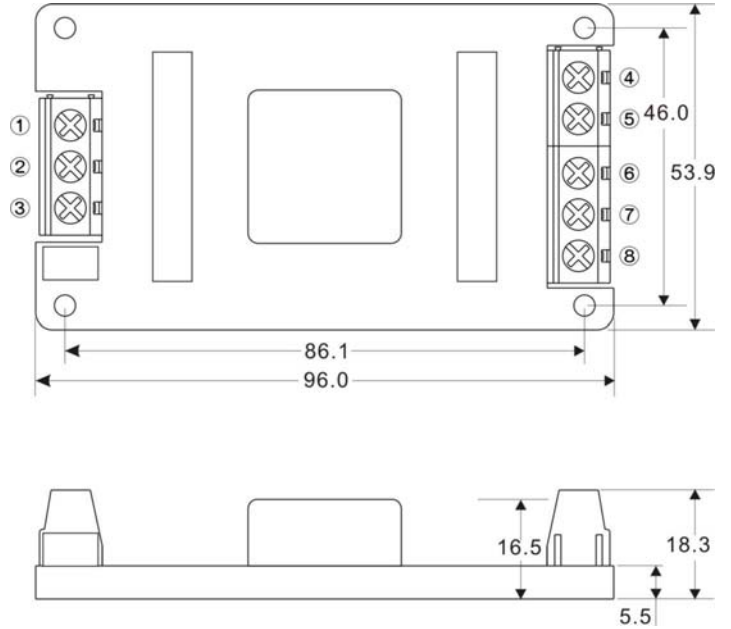
**SW20 SERIES**

**20 Watts**

**SW20-A2**



PIN#	Single
1	CTRL
2	-DC IN
3	+DC IN
4.	-DC OUT
5	NO CONNECT
6	NO CONNECT
7	NO CONNECT
8	+DC OUT



**SW20-A5**



PIN#	Single
1	CTRL
2	-DC IN
3	+DC IN
4.	-DC OUT
5	NO CONNECT
6	NO CONNECT
7	NO CONNECT
8	+DC OUT

