

### KEY FEATURES

- Power Module for PCB Mountable
- Six-sided Continuous Shield
- 4:1 Wide Input Range
- High Efficiency
- Standard Package
- 2 Years Product Warranty



### ELECTRICAL SPECIFICATIONS

Model No. ( Single Output )	SF30-24-2.5S	SF30-24-3.3S	SF30-24-5S	SF30-24-12S	SF30-24-15S	SF30-24-24S
Max. Output Wattage (W)	15W	19.8W	30W	30W	30W	30W
Input Voltage (V.DC.)	24V (10-40V)	24V (10-40V)	24V (10-40V)	24V (10-40V)	24V (10-40V)	24V (10-40V)
Output Voltage (V.DC.)	2.5V / 6000mA	3.3V / 6000mA	5V / 6000mA	12V / 2500mA	15V / 2000mA	24V / 1250mA
Efficiency (%)	80%	83%	85%	83%	83%	84%
capacitor Load max	33000µF	19500µF	10200µF	820µF	420µF	180µF

Model No. ( Single Output )	SF30-48-2.5S	SF30-48-3.3S	SF30-48-5S	SF30-48-12S	SF30-48-15S	SF30-48-24S
Max. Output Wattage (W)	15W	19.8W	30W	30W	30W	30W
Input Voltage (V.DC.)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)
Output Voltage (V.DC.)	2.5V / 6000mA	3.3V / 6000mA	5V / 6000mA	12V / 2500mA	15V / 2000mA	24V / 1250mA
Efficiency (%)	81%	85%	87%	84%	84%	84%
capacitor Load max	33000µF	19500µF	10200µF	820µF	420µF	180µF

Model No. ( Dual Output )	SF30-24-5D	SF30-24-12D	SF30-24-15D	SF30-48-5D	SF30-48-12D	SF30-48-15D
Max. Output Wattage (W)	30W	30W	30W	30W	30W	30W
Input Voltage (V.DC.)	24V (10-40V)	24V (10-40V)	24V (10-40V)	48V (18-75V)	48V (18-75V)	48V (18-75V)
Output Voltage (V.DC.)	±5V / ±3000mA	±12V / ±1250mA	±15V / ±1000mA	±5V / ±3000mA	±12V / ±1250mA	±15V / ±1000mA
Efficiency (%)	81%	83%	83%	82%	84%	83%
capacitor Load max	±4800µF	±560µF	±470µF	±4800µF	±560µF	±470µF

Model No. ( Single Output )	SF30-24-2.5S	SF30-24-3.3S	SF30-24-5S	SF30-24-12S	SF30-24-15S	SF30-24-24S	
Max Output Wattage (W)	15W	19.8W	30W	30W	30W	30W	
Output	Voltage (V.DC.)	2.5	3.3	5	12	15	24
	Voltage Accuracy	±2%					
	Current (mA) max	6000	6000	6000	2500	2000	1250
	Line Regulation (LL-HL) (typ.)	±0.5%					
	Load Regulation (10-100%) (typ.)	±1%					
	Ripple	100 mV max.			±1% max.		
	Noise	100 mV max.			±1% max.		
	Trim	±10%					
Protection	Switching Frequency	250KHz					
	Over Power Protection	Works over 120% of rating and recovers automatically.					
	Over Voltage Protection	Zener diode clamp					
Isolation	Short Circuit Protection	Hiccup mode, auto-recovery					
	Voltage	1600 VDC.					
	Resistance	10 <sup>9</sup> ohms					
Environment	Capacitance	1000 pF					
	Operating Temperature	-25°C...+70°C (with derating)					
	Storage Temperature	-55°C...+105°C					
	Case Temperature	+100°C max.					
	Temperature Coefficient	±0.02% Per°C					
	Humidity	95% RH					
	MTBF	>550,000 h @ 25°C (MIL-HDBK-217F)					
Physical	Dimension (L x W x H)	2.0 x 1.60 x 0.47 Inches ( 50.80 x 40.6 x 11.90 mm ) Tolerance ±0.5 mm					
	Case Material	Nickel-Coated Copper with Non-Conductive Base, Six-side shielded.					
	Weight	58 g					
	Cooling Method	Free-air convection					

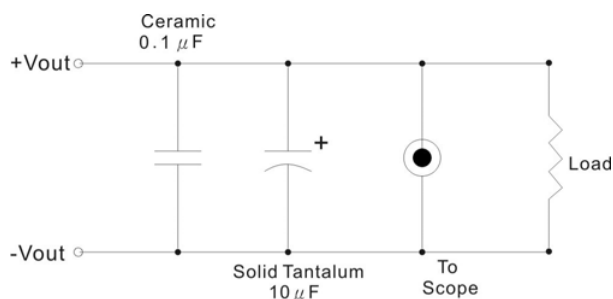
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No. (Dual Output)		SF30-24-5D SF30-48-5D	SF30-24-12D SF30-48-12D	SF30-24-15D SF30-48-15D
Max Output Wattage (W)		30W		
Input	Input Filter	π type		
Output	Voltage (V,DC.)	±5	±12	±15
	Voltage Accuracy	±2%		
	Current (mA) max	±3000	±1250	±1000
	Line Regulation (LL-HL) (typ.)	±0.5%		
	Load Regulation (10-100%) (typ.)	±1%		
	Ripple	±1%		
	Noise	±1%		
	Trim	±10%		
	Switching Frequency	250KHz		
Protection	Over Power Protection	Works over 120% of rating and recovers automatically.		
	Over Voltage Protection	Zener diode clamp		
	Short Circuit Protection	Hiccup mode, auto-recovery		
Isolation	Voltage	1600 VDC.		
	Resistance	10 <sup>8</sup> ohms		
	Capacitance	1000 pF		
Environment	Operating Temperature	-25°C...+70°C (with derating)		
	Storage Temperature	-55°C...+105°C		
	Case Temperature	+100°C max.		
	Temperature Coefficient	±0.02% Per°C		
	Humidity	95% RH		
	MTBF	>550,000 h @ 25°C (MIL-HDBK-217F)		
Physical	Dimension (L x W x H)	2.0 x 1.60 x 0.47 Inches ( 50.80 x 40.6 x 11.90 mm ) Tolerance ±0.5 mm		
	Case Material	Nickel-Coated Copper with Non-Conductive Base, Six-side shielded.		
	Weight	58 g		
	Cooling Method	Free-air convection		

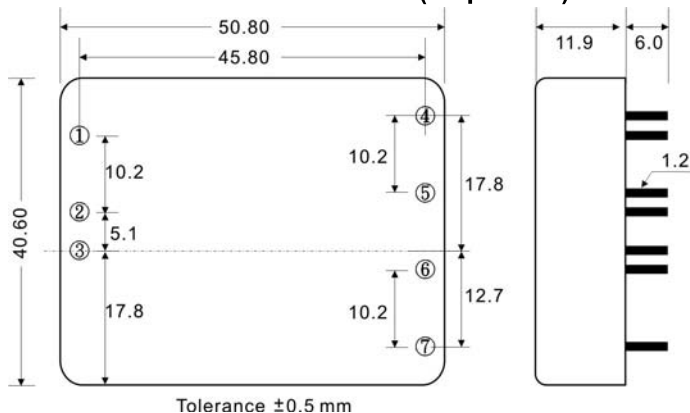
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

## OUTPUT NOISE

The output noise is measured with 10μF tantalum capacitor and 0.1μF ceramic capacitor across output.



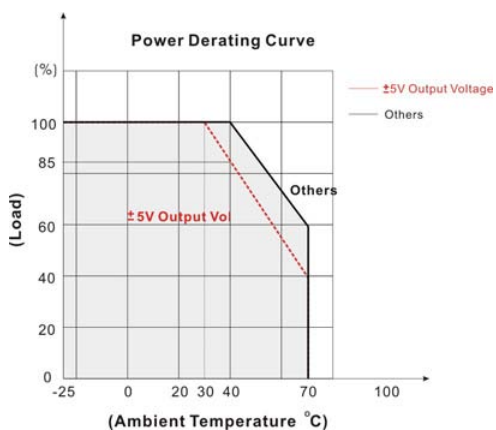
## MECHANICAL DIMENSION ( Top View )



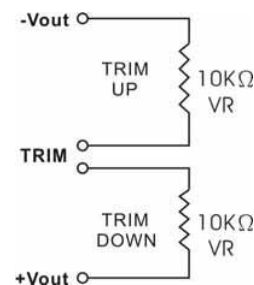
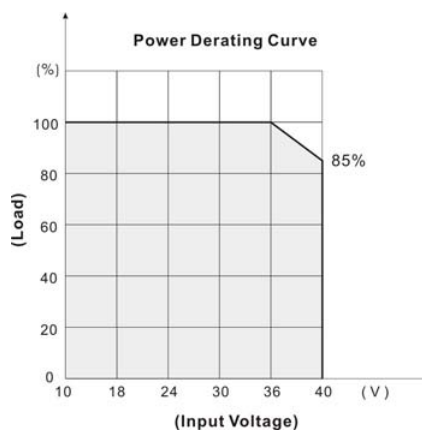
Tolerance ±0.5 mm

PIN#	Single	Dual
1	CTRL	CTRL
2	-DC IN	-DC IN
3	+DC IN	+DC IN
4	TRIM	TRIM
5	-DC OUT	-DC OUT
6	+DC OUT	COMMON
7	NO PIN	+DC OUT

## DERATING



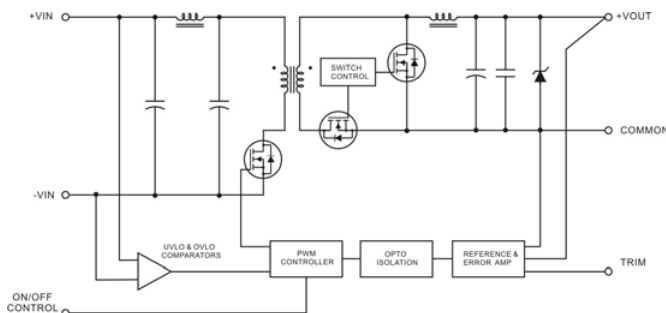
## REMOTE ON/OFF CONTROL



## BLOCK DIAGRAM

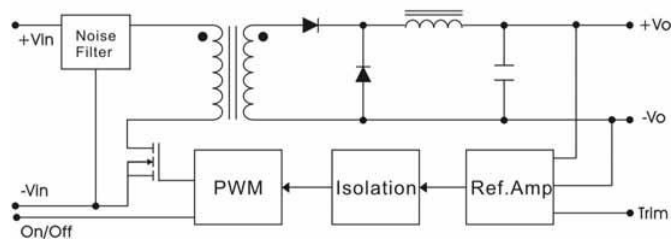
### Single Output

Output Voltage (V.DC) : 2.5V, 3.3V, 5V

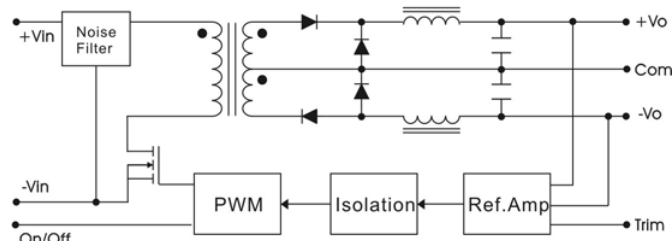


### Single Output

Output Voltage (V.DC) : 12V, 15V, 24V



### Dual Output

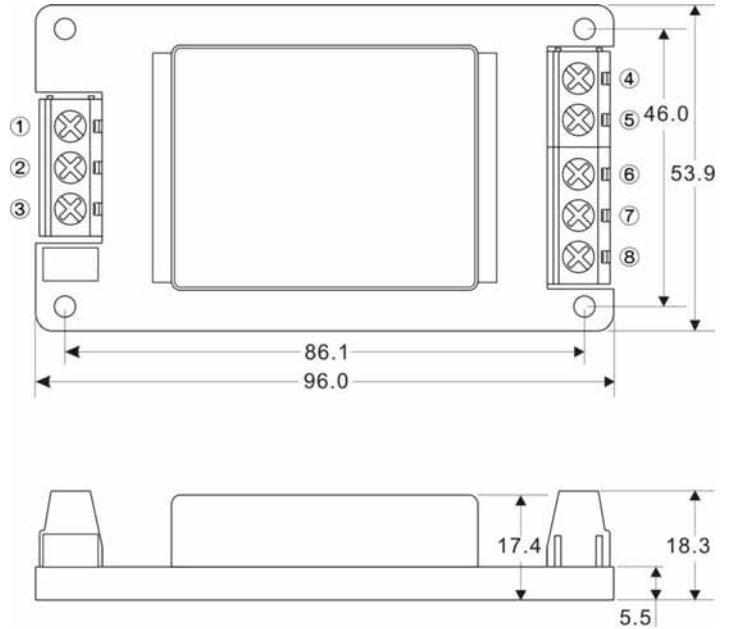


# SCREW TERMINAL

## SF30-A2



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



## SF30-A5



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

