

KEY FEATURES

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


ELECTRICAL SPECIFICATIONS

Model No. (Single Output)	SF30-24-1.8S	SF30-24-2.5S	SF30-24-3.3S	SF30-24-5S	SF30-24-12S	SF30-24-15S	SF30-24-24S
Max. Output Wattage (W)	10.8W	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)	24V (10-40V)
Output Voltage (V.DC.)	1.8V / 6000mA	2.5V / 6000mA	3.3V / 6000mA	5V / 6000mA	12V / 2500mA	15V / 2000mA	24V / 1250mA
Efficiency (%)	78%	80%	81%	82%	83%	83%	83%

Model No. (Single Output)	SF30-48-1.8S	SF30-48-2.5S	SF30-48-3.3S	SF30-48-5S	SF30-48-12S	SF30-48-15S	SF30-48-24S
Max. Output Wattage (W)	10.8W	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)	48V (18-75V)
Output Voltage (V.DC.)	1.8V / 6000mA	2.5V / 6000mA	3.3V / 6000mA	5V / 6000mA	12V / 2500mA	15V / 2000mA	24V / 1250mA
Efficiency (%)	78%	80%	81%	82%	83%	83%	83%

Model No. (Dual Output)	SF30-24-12D	SF30-24-15D	SF30-48-12D	SF30-48-15D
Max. Output Wattage (W)	30W	30W	30W	30W
Input Voltage (V.DC.)	24V (10-40V)	24V (10-40V)	48V (18-75V)	48V (18-75V)
Output Voltage (V.DC.)	±12V / ±1250mA	±15V / ±1000mA	±12V / ±1250mA	±15V / ±1000mA
Efficiency (%)	81%	83%	81%	81%

Model No. (Single Output)	SF30-24-1.8S	SF30-24-2.5S	SF30-24-3.3S	SF30-24-5S	SF30-24-12S	SF30-24-15S	SF30-24-24S	
Max Output Wattage (W)	10.8W	15W	19.8W	30W	30W	30W	30W	
Output	Voltage (V.DC.)	1.8	2.5	3.3	5	12	15	24
	Voltage Accuracy	±2%						
	Current (mA) max	6000	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%						
	Switching Frequency	350KHz						
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 ⁸ 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						

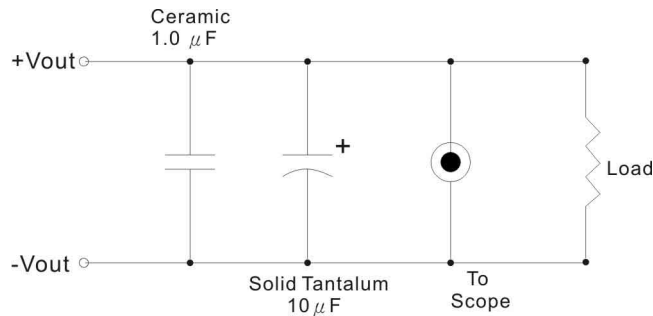
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No. (Dual Output)	SF30-24-12D SF30-48-12D	SF30-24-15D SF30-48-15D
Max Output Wattage (W)	30W	30W
Input	Input Filter	π type
Output	Voltage (V.DC.)	± 12
	Voltage Accuracy	$\pm 2\%$
	Current (mA) max	± 1250
	Line Regulation (LL-HL) (typ.)	$\pm 0.5\%$
	Load Regulation (10-100%) (typ.)	$\pm 1\%$
	Ripple	$\pm 1\%$
	Noise	$\pm 1\%$
	Trim	$\pm 10\%$
Protection	Switching Frequency	350KHz
	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	10^8 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	$\pm 0.02\%$ Per°C
	Humidity	95% RH
Physical	MTBF	>550,000 h @ 25°C (MIL-HDBK-217F)
	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

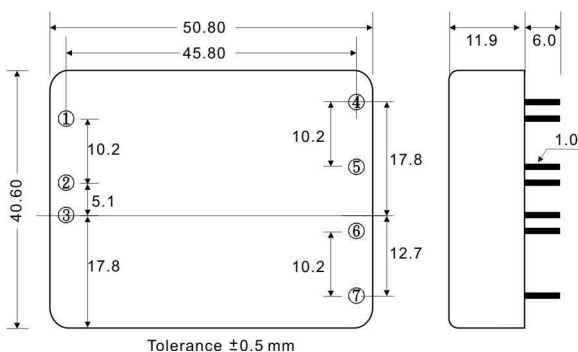
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OUTPUT NOISE

The output noise is measured with 10 μ F tantalum capacitor and 1 μ F ceramic capacitor across output.

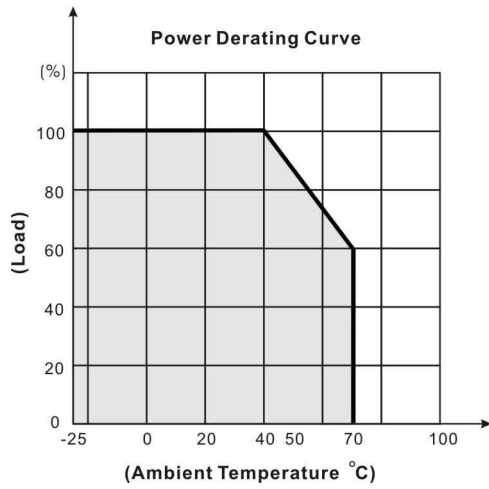


MECHANICAL DIMENSION (Top View)

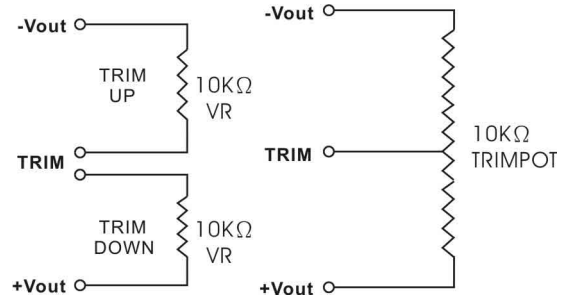


PIN#	Single	Dual
1	CTRL	CTRL
2	-DC IN	-DC IN
3	+DC IN	+DC IN
4	TRIM	TRIM
5	-DC OUT	-DC OUT
6	+DC OUT	COMMON
7	NO PIN	+DC OUT

DERATING



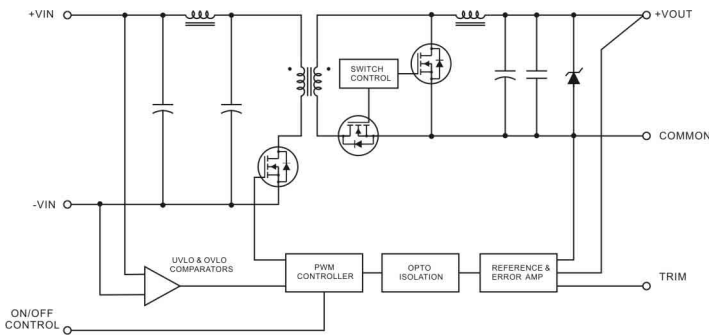
REMOTE ON/OFF CONTROL



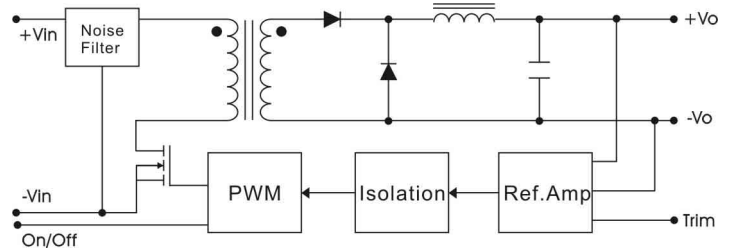
BLOCK DIAGRAM

Single Output

Output Voltage (V.DC) : 1.8V, 2.5V, 3.3V, 5V



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



Dual Output

