

KEY FEATURES

- Power Module for PCB Mountable
- High Efficiency and Reliability
- 4:1 Wide Input Range
- Single and Dual Output
- Regulated Output
- Low Ripple and Noise
- 2-Years Product Warranty


ELECTRICAL SPECIFICATIONS

Model No. (Single Output)	SH08-24F-3.3S	SH08-24F-5S	SH08-24F-12S	SH08-24F-15S	SH08-24F-24S
Input Voltage (V.DC.)	12V (9-36V)	12V (9-36V)	12V (9-36V)	12V (9-36V)	12V (9-36V)
Output Voltage (V.DC.)	3.3V/2200mA	5V/1600mA	12V/666mA	15V/533mA	24V/333mA
Efficiency (typ.)	82%	84%	85%	85%	85%
Capacitor Load (max)	2200 μ F	2200 μ F	1200 μ F	680 μ F	330 μ F

Model No. (Single Output)	SH08-48F-3.3S	SH08-48F-5S	SH08-48F-12S	SH08-48F-15S	SH08-48F-24S
Input Voltage (V.DC.)	24V (18-75V)	24V (18-75V)	24V (18-75V)	24V (18-75V)	24V (18-75V)
Output Voltage (V.DC.)	3.3V/2200mA	5V/1600mA	12V/666mA	15V/533mA	24V/333mA
Efficiency (typ.)	82%	84%	85%	85%	85%
Capacitor Load (max)	2200 μ F	2200 μ F	1200 μ F	680 μ F	330 μ F

Model No. (Single Output)	SH08-24F-3.3S	SH08-24F-5S	SH08-24F-12S	SH08-24F-15S	SH08-24F-24S	
Max Output Wattage (W)	8W					
Input	π type					
Output	Input Filter Voltage (V.DC.)	3.3	5	12	15	24
	Voltage Accuracy	$\pm 2\%$				
	Current (mA) max	2200	1600	666	533	333
	Line Regulation (LL-HL) (typ.)	$\pm 0.5\%$				
	Load Regulation (10-100%) (typ.)	$\pm 1\%$				
	Minimum Load	0%				
	Ripple	50 mV max.				
	Noise	100 mV max.				
Protection	Switching Frequency	300KHz				
	Over Power Protection	Above 105% Rated Output Power				
Isolation	Short Circuit Protection	Current limit, auto-recovery				
	Voltage	1600 VDC.				
	Resistance	10 ⁸ ohms				
Environment	Capacitance	1000 pF				
	Operating Temperature	-25°C...+60°C (at Full Load)				
	Storage Temperature	-55°C...+105°C				
	Case Temperature	+100°C max.				
	Temperature Coefficient	$\pm 0.02\%$ Per°C				
	Humidity	95% RH				
Physical	MTBF	>800,000 h @ 25°C (MIL-HDBK-217F)				
	Dimension (L x W x H)	1.25 x 0.8 x 0.44 Inches (31.8 x 20.3 x 11.2 mm) Tolerance ± 0.5 mm				
	Case Material	Nickel-Coated Copper with Non-Conductive Base, Six-side shielded.				
	Weight	20 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)	SH08-24F-5D	SH08-24F-12D	SH08-24F-15D
Input Voltage (V.DC.)	12V (9-36V)	12V (9-36V)	12V (9-36V)
Output Voltage (V.DC.)	±5V / ±800mA	±12 / ±333mA	±15 / ±267mA
Efficiency (typ.)	82%	84%	84%
Capacitor Load (max)	1000µF	220µF	100µF

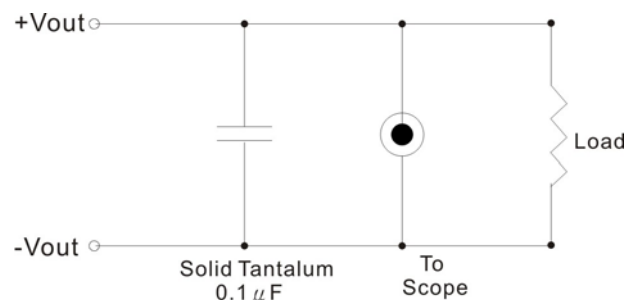
Model No. (Dual Output)	SH08-48F-5D	SH08-48F-12D	SH08-48F-15D
Input Voltage (V.DC.)	24V (18-75V)	24V (18-75V)	24V (18-75V)
Output Voltage (V.DC.)	±5V / ±800mA	±12 / ±333mA	±15 / ±267mA
Efficiency (typ.)	82%	85%	84%
Capacitor Load (max)	1000µF	220µF	100µF

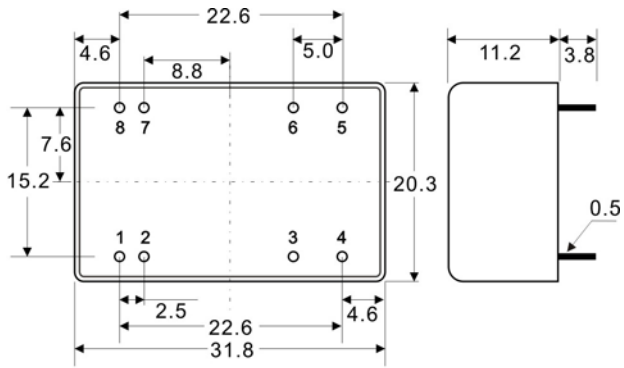
Model No. (Dual Output)	SH08-24F-5D SH08-48F-5D	SH08-24F-12D SH08-48F-12D	SH08-24F-15D SH08-48F-15D
Max Output Wattage (W)	8W		
Input	Input Filter	π type	
Output	Voltage (V.DC.)	±5	±12
	Voltage Accuracy	±2%	
	Current (mA) max	±800	±333
	Line Regulation (LL-HL) (typ.)	±0.5%	
	Load Regulation (10-100%) (typ.)	±1%	±1%
	Minimum Load	0%	
	Ripple	50 mV max (Vp-p)	
	Noise	<0.5% Vout +50mV max (Vp-p)	
Protection	Switching Frequency	300KHz	
	Over Power Protection	Works over 120% of rating and recovers automatically.	
Isolation	Short Circuit Protection	Current limit, auto-recovery	
	Voltage	1600 VDC.	
Environment	Resistance	10 ⁹ ohms	
	Capacitance	1000 pF	
	Operating Temperature	-25°C...+60°C (at Full Load)	
Physical	Storage Temperature	-55°C...+105°C	
	Case Temperature	+100°C max.	
	Temperature Coefficient	±0.02% Per°C	
	Humidity	95% RH	
	MTBF	>800,000 h @ 25°C (MIL-HDBK-217F)	
Physical	Dimension (L x W x H)	1.25 x 0.8 x 0.44 Inches (31.8 x 20.3 x 11.2 mm) Tolerance ±0.5 mm	
	Case Material	Nickel-Coated Copper with Non-Conductive Base, Six-side shielded.	
	Weight	20 g	
	Cooling Method	Free-air convection	

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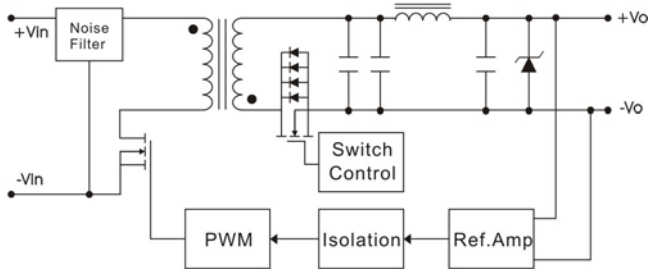
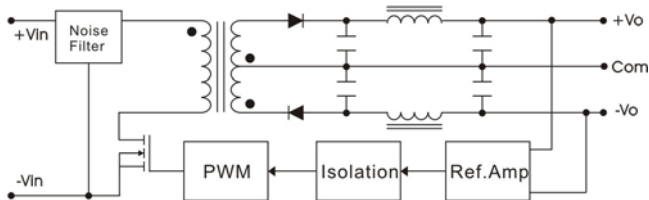
OUTPUT NOISE

The output noise is measured with 0.1µF tantalum capacitor



MECHANICAL DIMENSION (Top View)

 Tolerance ± 0.5 mm

PIN#	Single	Dual
1	-VIN	-VIN
2	-VIN	-VIN
3	NO PIN	COMMON
4	NC	-VOUT
5	+VOUT	+VOUT
6	-VOUT	COMMON
7	+VIN	+VIN
8	+VIN	+VIN

BLOCK DIAGRAM
Single Output

Dual Outputs

DERATING
