

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



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.)	24V (9-36V)	24V (9-36V)	24V (9-36V)	24V (9-36V)	24V (9-36V)
Output Voltage (V.DC.)	3.3V/2200mA	5V/1600mA	12V/666mA	15V/533mA	24V/333mA
Efficiency (typ.)	79%	82%	82%	81%	81%
Capacitor Load (max)	2000 uF	800 uF	2200 uF	3000 uF	630 uF

Model No. (Single Output)	SH08-48F-3.3S	SH08-48F-5S	SH08-48F-12S	SH08-48F-15S	SH08-48F-24S
Input Voltage (V.DC.)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)	48V (18-75V)
Output Voltage (V.DC.)	3.3V/2200mA	5V/1600mA	12V/666mA	15V/533mA	24V/333mA
Efficiency (typ.)	80%	84%	84%	83%	83%
Capacitor Load (max)	85000 uF	70000 uF	2600 uF	3400 uF	1800 uF

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	Input Filter				
	Voltage (V.DC.)				
	3.3	5	12	15	24
Output	Voltage Accuracy				
	±2%				
	Current (mA) max				
	2200	1600	666	533	333
	Line Regulation (LL-HL) (typ.)				
	±0.5%				
	Load Regulation (10-100%) (typ.)				
±1%					
	Minimum Load				
	0%				
	Ripple				
	50 mV max.				
	Noise				
	100 mV max.				
	Switching Frequency				
	300KHz				
Protection	Over Power Protection				
	Above 105% Rated Output Power				
Isolation	Short Circuit Protection				
	Current limit, auto-recovery				
Environment	Voltage				
	1600 VDC.				
	Resistance				
	10 ⁸ ohms				
	Capacitance				
	1000 pF				
Physical	Operating Temperature				
	-25°C...+60°C (at Full Load)				
	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				

1. All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.
 2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.

Model No. (Dual Output)	SH08-24F-5D	SH08-24F-12D	SH08-24F-15D
Input Voltage (V.DC.)	24V (9-36V)	24V (9-36V)	24V (9-36V)
Output Voltage (V.DC.)	±5V / ±800mA	±12 / ±333mA	±15 / ±267mA
Efficiency (typ.)	82%	85%	85%
Capacitor Load (max)	±6600 uF	±1000 uF	±200 uF

Model No. (Dual Output)	SH08-48F-5D	SH08-48F-12D	SH08-48F-15D
Input Voltage (V.DC.)	48V (18-75V)	48V (18-75V)	48V (18-75V)
Output Voltage (V.DC.)	±5V / ±800mA	±12 / ±333mA	±15 / ±267mA
Efficiency (typ.)	82%	85%	85%
Capacitor Load (max)	±28000 uF	±720 uF	±350 uF

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%	
	Minimum Load	0%	
	Ripple	50 mV max (Vp-p)	
	Noise	<0.5% Vout +50mV max (Vp-p)	
Protection	Over Power Protection	Works over 120% of rating and recovers automatically.	
	Short Circuit Protection	Current limit, auto-recovery	
Isolation	Voltage	1600 VDC.	
	Resistance	10 ⁸ ohms	
	Capacitance	1000 pF	
Environment	Operating Temperature	-25°C...+60°C (at Full Load)	
	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	

1. All specifications valid at normal input voltage, full load and +25°C after warm-up time unless otherwise stated.
2. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.

OUTPUT NOISE

The output noise is measured with 0.1μF tantalum capacitor



