

100 Watt Embedded Power Supply

Features

- Universal AC input range
- Built-in Active PFC function, PF > 0.93
- Miniature size, high power density, high efficiency, long life and high reliability
- Withstand 300VA surge input for 5 secs.
- Output protections: OLP/SCP/OPP
- Wide operating ambient temperature (-20°C ~ 70°C)
- All using 105°C long life electrolytic capacitors
- 100% full load burn-in test
- Easy assembling from top side
- PCB soldering side with conformal coating
- Suitable for critical applications
- 3 year warranty

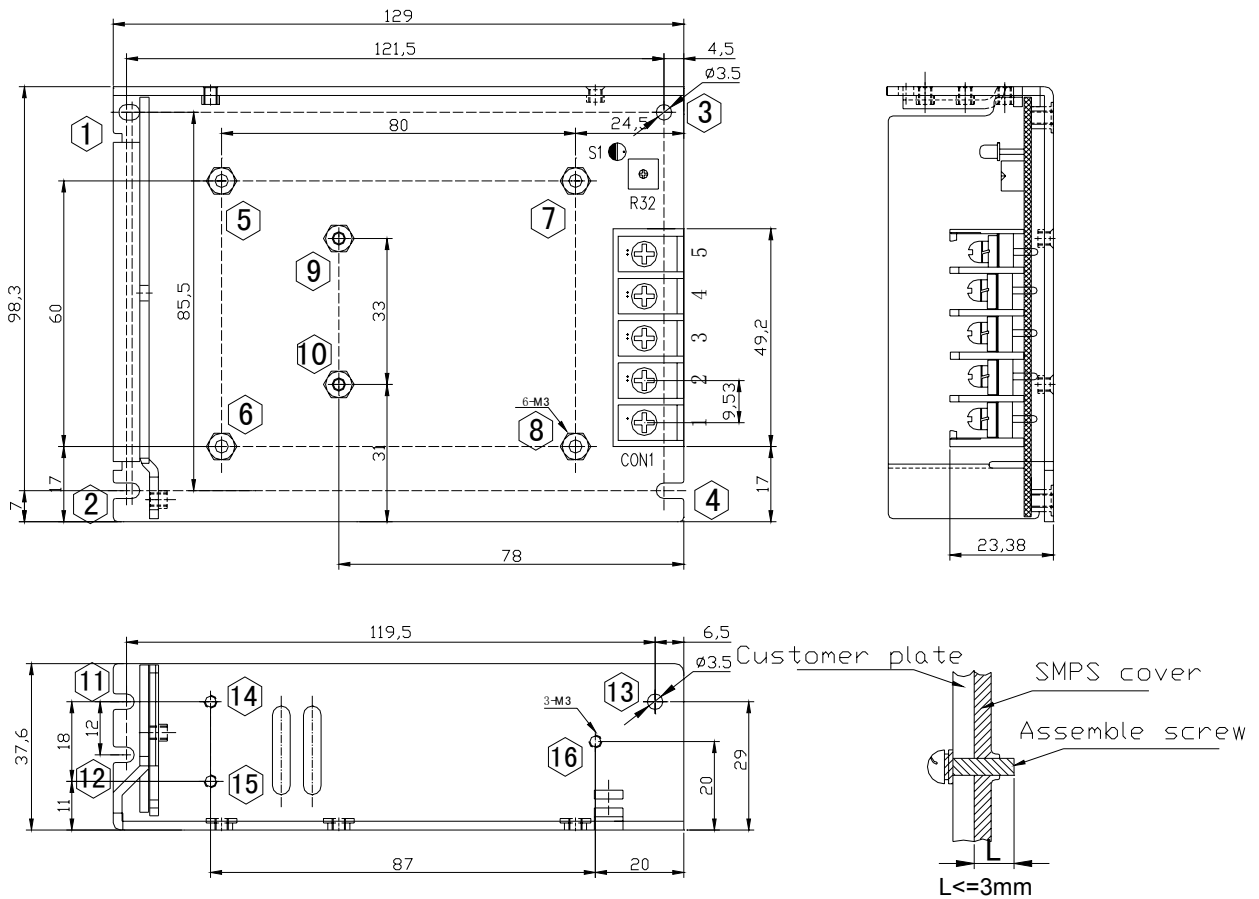


Specifications

		GKF-100-5	GKF-100-12	GKF-100-24	GKF-100-48	
OUTPUT	DC Output	5V	12V	24V	48V	
	Rated Current	20A	8.5A	4.2A	2.2A	
	Current Range (NOTE 1)	0 ~ 20A	0 ~ 8.5A	0 ~ 4.2A	0 ~ 2.2A	
	Ripple and Noise (NOTE 2)	0 ~ 70°C	≤ 150mV	≤ 150mV	≤ 150mV	≤ 150mV
		-20°C ~ 0°C	≤ 150mV	≤ 150mV	≤ 150mV	≤ 200mV
	Voltage ADJ. Range	3.3V – 5.5V	10 ~ 15V	21 ~ 27V	43.2 ~ 52.8V	
	Voltage Accuracy	±2.0%	±2.0%	±1.0%	±1.0%	
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	
	Load Regulation	±2.0%	±2.0%	±1.0%	±1.0%	
	Set-up Time	≤ 4S@115Vac, ≤ 2S@230Vac				
	Hold up Time	≥ 12mS (230Vac input, Full load)				
Temperature Coefficient	±0.03%/°C					
Overshoot and Undershoot	< 5.0%					
INPUT	Voltage Range	90Vac ~ 264Vac				
	Frequency Range	47Hz – 63Hz				
	Power Factor (Typical)	PF > 0.98@115Vac, PF > 0.93@230Vac				
	Efficiency (Typical) 230Vac input	≥ 84%	≥ 87%	≥ 88%	≥ 88%	
	AC Current (Max.)	< 1.5A				
	Inrush Current (Typical)	< 30A@115Vac < 50A@230Vac Cold Start				
	Leakage Current	Input – output: ≤ 0.25mA Input – PG: ≤ 3.5mA				
PROTECTION	Over Load	110% ~ 150% of rated output current, hiccup mode, auto recovery				
	Over Power	110% ~ 150% of rated output current, hiccup mode, auto recovery				
	Short Circuit	Long-term mode, auto recovery				
ENVIRONMENT	Operating amb. Temp. & Hum.	-20°C ~ 70°C; 20% ~ 90%RH No Condensing (refer to the derating curve)				
	Storage Temp. & Hum.	-40°C ~ 85°C; 10% ~ 95%RH No Condensing				
SAFETY & EMC (NOTE 3)	Safety Standards	UL60950-1 2nd Ed; EN60950-1:2005 (2nd Ed); EN60950-1:2006				
	Withstand Voltage	Primary – Secondary: 3.0KVVac; ≤10mA Primary – PG: 1.5KVVac; ≤10mA Secondary – PG: 0.5KVVac; ≤10mA				
	Isolation Resistance	100M ohms				
	EMS Emission	Compliance to EN55022 Class B				
	Harmonic Current	Compliance to EN61000-3-2, Class D				
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, heavy industry level				
OTHERS	MTBF (MIL-HDBK-217F)	More than 200,000Hrs (25°C, Full load)				
	Dimension (L*W*H)	129 x 98.3 x 37.6 mm				
	Packing	30PCS/CTN, 14.6KGS, 0.04CBM				
	Cooling Method	Cooling by free air convection				
NOTE	1. All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature 2. Measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 uF & 10uF parallel capacitor 3. The SPS is considered a component which will be installed into final equipment. The equipment must be re-confirmed that it still meets EMC directives					

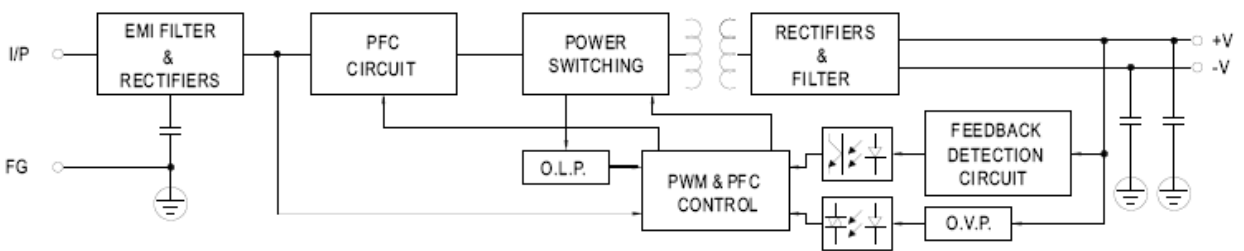
Mechanical Specification

unit: mm (Tolerance is ±1mm)



Pin1---Pin5: L N GND -V +V

Block Diagram



Derating Curve

