

150 Watt Embedded Power Supply

Features

- Universal AC input range
- Built-in Active PFC function, PF > 0.95
- Miniature size, high power density, high efficiency, long life and high reliability
- Withstand 300VA surge input for 5 secs.
- Output protections: OLP/OVP/SCP/OTP/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-150-12

GKF-150-15

GKF-150-24

GKF-150-48

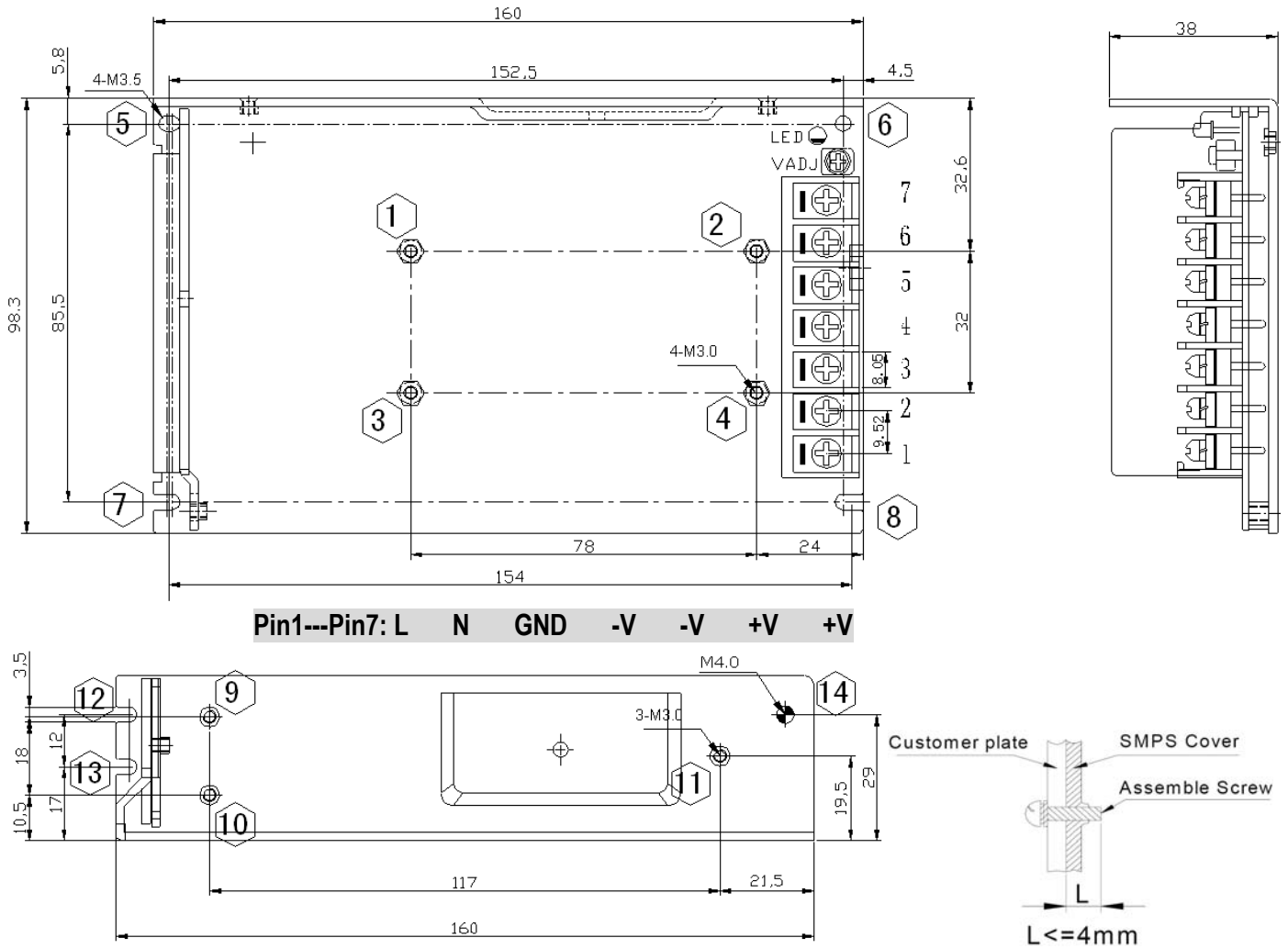
		GKF-150-12	GKF-150-15	GKF-150-24	GKF-150-48	
OUTPUT	DC Output	12V	15V	24V	48V	
	Rated Current	12.5A	10A	6.3A	3.2A	
	Current Range (NOTE 1)	0 ~ 12.5A	0 ~ 10A	0 ~ 6.3A	0 ~ 3.2A	
	Ripple and Noise (NOTE 2)	0 ~ 70°C	≤ 100mV	≤ 100mV	≤ 100mV	≤ 100mV
		-20°C ~ 0°C	≤ 200mV	≤ 200mV	≤ 200mV	≤ 200mV
	Voltage ADJ. Range	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	43.2 ~ 52.8V	
	Voltage Accuracy	±2.0%	±2.0%	±2.0%	±2.0%	
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	
	Load Regulation	±2.0%	±2.0%	±1.0%	±1.0%	
	Set-up Time	≤ 3S@115Vac, ≤ 2S@230Vac				
	Hold up Time	≥ 10mS (220Vac 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 > 0.95@230Vac				
	Efficiency (Typical) 230Vac input	≥ 86%	≥ 87%	≥ 87%	≥ 88%	
	AC Current (Max.)	< 2A				
	Inrush Current (Typical)	< 30A@115Vac	< 45A@230Vac	Cold Start		
	Leakage Current	Input – output: ≤ 0.25mA		Input – PG: ≤ 3.5mA		
PROTECTION	Over Load	105% ~ 150% of rated output current, hiccup mode, auto recovery				
	Over Power	105% ~ 150% of rated output current, hiccup mode, auto recovery				
	Over Voltage	115% ~ 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.	-30°C ~ 85°C; 10% ~ 95%RH	No Condensing			
SAFETY & EMC (NOTE 3)	Safety Standards	UL60950-1 2nd Ed; IEC 60950-1:2005 (2nd Ed); EN60950-1:2006				
	Withstand Voltage	Primary – Secondary: 3.0KVac; ≤10mA Primary – PG: 1.5KVac; ≤10mA Secondary – PG: 0.5KVac; ≤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; heavy industry level				
OTHERS	MTBF (MIL-HDBK-217F)	More than 200,000Hrs (25°C, Full load)				
	Dimension (L*W*H)	160 x 98.3 x 38 mm				
	Packing	20PCS/CTN, 14KGS, 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					

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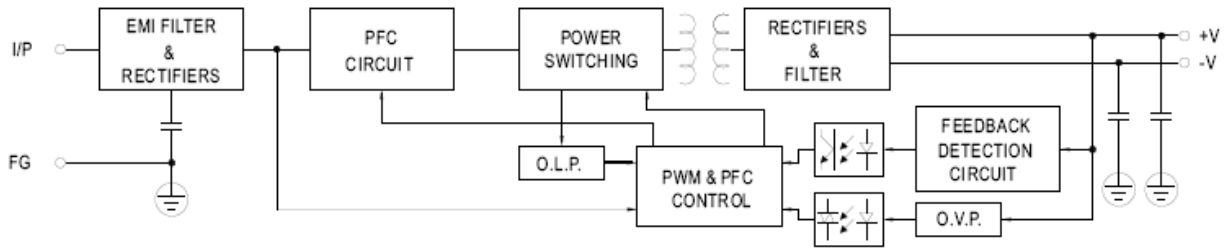


Mechanical Specification

unit: mm (Tolerance is ±1mm)



Block Diagram



Derating Curve

