## 100Watts Single Output with active PFC CS INC.



# °**91**°°**( (**CB®

#### Features:

- ۶ 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
- AAA Wide operating ambient temp  $(-20^{\circ}C \sim 70^{\circ}C)$
- All using  $105^{\circ}$ 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 years warranty

### SPECIFICATION

MODEL		MFGKF-100-5	MFGKF-100-12	MFGKF-100-24	MFGKF-100-48	
	DC Output		5V	12V	24V	48V
OUTPUT	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℃	≤150mV	≤150mV	≤150mV	≤150mV
		-20~0°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.)		<1.5 A			
	Inrush Current (Typical)		<30@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 Standards		UL60950-1 2nd Ed; IEC 60950-1:2005(2nd Ed) ;EN60950-1:2006			
	Withstand Voltage		$\label{eq:primary-Secondary:3.0KVac;} \\ \leqslant 10 \text{mA.Primary-PG:1.5KVac;} \\ \leqslant 10 \text{mA.Secondary-PG:0.5KVDC;} \\ \leqslant 10 \text{mA.Primary-PG:0.5KVDC;} \\ \end{cases} \\ \end{cases} \\ \end{cases} \\ \end{cases} \\ $			
SAFETY & EMC	Isolation Resistance 100M ohms					
Note 3	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)		129×98.3×37.6mm			
	Packing		30PCS/CTN, 14.6KGS, 0.04CBM			
	Cooling method		Cooling by free air convection			
NOTE	<ol> <li>All parameters NOT specially mentioned are measured at rated input, rated load and 25°C of ambient temperature.</li> <li>Measured at 20MHz of bandwidth</li> <li>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.</li> </ol>					



# **MFGKF-100 Series**

