

## 600Watts Single Output

# MFPDF-600 Series



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## $\geq$ Build in constant current limiting circuit Built in Remote Sense Function ≻ $\triangleright$ Build in DC OK signal Wide operating ambient temperature (-30°C~70°C) $\triangleright$

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≻ Conformal coating at PCB both sides

Universal AC input/ Full range Built-in active PFC function, PF>0.96

Using ZVS technology to reduce power dissipation

Built in Fan speed control and over temp.protection

Built in AC inrush current limiting circuit(<20A)

- 1 U low profile,41mm
  - 3 years warranty

### **SPECIFICATION** MFPDF-600-12 MFPDF-600-24 MFPDF-600-48 MODEL MFPDF-600-36 DC Output 12V 24V 36V 48V Rated Current (100~127Vac) 34A 22A 14A 11A 42A 13.6A Rated Current (128~264Vac) 26.5A 17.5A 150mV 200mV **Ripple and Noise** 0-70 120mV 150mV -30 180mV 150mV 150mV 200mV Note 2 Voltage ADJ. Range -5%~+10% of rated output voltage OUTPUT ±2.0% ±2.0% ±2.0% Voltage Accuracy ±2.0% ±0.5% ±0.2% Line Regulation ±0.5% ±0.5% Load Regulation ±1.0% ±1.0% ±1.0% ±1.0% <1.5S (230Vac input, Full load), <3S (115Vac input, Full load) Set-up Time Hold up Time >16mS/ (230Vac input, Full load) **Temperature Coefficient** ±0.05%/ <5.0% Overshoot and Undershoot Voltage Range 90Vac~264Vac. 47Hz--63Hz **Frequency Range** PF>0.98/115VAC PF>0.96/230VAC Power Factor(Typical) INPUT Efficiency (Typical) 88% 89% 90% 90% AC Current (max.) <9A Inrush Current (Typical) <20A@230Vac Cold start Input-output: <0.25mA Input—PG: ≤3.5mA Leakage Current Over Load 110%~135% of rated output current, constant current **Over Temperture** 105℃+5℃(detect on Mosfet temperature);shut down,auto recovery after the temperature goes down to 75℃ PROTECTION **Over Voltage** 110%~150% of rated voltage; constant voltage Short Circuit Long-term mode, constant current, auto recovery Operating amb. Temp. & Hum. -30~70 ; 20%~90%RH No condensing (refer to derating curve) **ENVIRONMENT** Storage Temp. & Hum. -40~85; 10%~95%RH No condensing UL60950-1 2nd Ed; IEC 60950-1:2005(2nd Ed) ;EN60950-1:2006 Safety Standards Withstand Voltage Primary-Secondary:3.0KVac; <10mA.Primary-PG:1.5KVac; <10mA.Secondary-PG:0.5KVac;<10mA. **SAFETY & EMC Isolation Resistance** ≥100M ohms (Note 3) EMI Conduction&Radiation Compliance to EN55022, CLASS B Harmonic Current Compliance to EN61000-3-2, class D **EMS** Immunity Compliance to EN61000-4-2,3,4,5,6,8,11; heavy industry level MTBF (MIL-HDBK-217F) More than 200,000Hrs (25, Full load) Dimension (L\*W\*H) 218×116.5×41mm (MFPDF-600-12 dimension is 226×116.5×41mm) OTHERS Packing 6PCS/CTN, 8.7KGS, 0.04CBM Fored air cooling(Built-in fan) Cooling method

EGA **MFPDF-600 Series** 600Watts Single Output ELECTRONICS INC All parameters NOT specially mentioned are measured at rated input, rated load and 25 of ambient temperature. Measured at 20MHz of bandwidth by using a 12° twisted pair-wire terminated with a 0.1 uF & 47uF parallel capacitor. 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. NOTE 2. Mechanical Specification Unit:mm -218 152.4 •32.8· രി ািটি ф CON2 d 4-M4 33 25 Ν b 11 € Ċ. 2 1 +V+V  $\overline{\mathbf{X}}$ 63.5 50 116.5 +V 3 (4)ø ◨║Ҏ 26.5 <u>CON1</u> o S1 ÐI. (B) (D Φ  $\widehat{7}$ Fixture A(option) Fixture A(131400003101) : for bottom assemble purpose,US\$0.05/pcs [10] (9) 21.5 <sub>41</sub> -4-M4 112 3 ۵ ÷ -4 12.5-152.4 32.8 SMPS Cover Customer plate Assemble Screw Position Function +S(Remote Sense) 1 2 -S(Remote Sense) 3 DC-OK 4 GND L<=4mm Block Diagram -ө + S ACTIVE RECTIFIERS EMI DC/DC Θ<u></u>P I/P  $\ominus$ INRUSH PFC FILTER ጲ ZVS LIMIT FILTERS Ә−S ΠTΡ CURRENT PE G LIMITINIG PFC REGULATOR -⊖ DC – □K AUX CONTROL POWER SUPPLY FAN ΠVP TEMP CONTROL SENSOR

