

Medical PSU FSP100-1K20M1

DESCRIPTION

This series of compact, open PCB constructed, AC-DC switching power supplies are capable of delivering 100 watts of continuous output power at convection cooling. They are suited for medical, information technology and industrial applications, but not for life-supporting medical equipment. Approval to both EN60601-1 and EN60950-1 safety standards improves design-in time and reduces end equipment compliance costs.

FEATURES

- Medical and ITE approvals

- Compact size 2" × 4" × 1.26" High power density 10 W/cubic inch 100 W output with convection cooling up to +50°C
- Low earth leakage current EN55011 /55022 class B emissions
- RoHS compliant

WATTAGE

Wattage: 100W

DIMENSION

101.6mm(L) x 50.8mm(W) x **Dimension:** 32.0mm(H)

INPUT SPECIFICATION

Input Range: 90-264 Vdc

Input Frequency: 47-63 Hz **Input Current:**

1.9A(rms) for100-120VAC, 1.1A(rms) for200-240VAC

Leakage Current: 150 µA max. @ 264 VAC,63



SAFETY STANDARD APPAOVA







OUTPUT SPECIFICATION

Ripple & Noise:

Maximum excursion of 4% or better on all models recovering to 1% of final value within 500 us after a 25% step load change All outputs protected to short circuit conditions.

Over Current Protection:

GENERAL SPECIFICATION Efficiency:

88~90% @ 230 VAC full load 40A @ 115 VAC or 80A @ 230 VAC, **Inrush Current:**

at 25"C cold start

ENVIRONMENTAL SPECIFICATION

TEMP.Range: Operating Temperature:-10°C to

+70°C

Storage Temperature: -40°C to +

MTBF: 270,000 hours at full load at 25"C

ambient temperature calculated per

MIL-HDBK-217F

*Output Voltage and Current Rating

	+12V1
Ripple-Noise(R-P) mV	120mV
Regulation Load %	±2%
Output Max.(A)	8.34A
Output Min.(A)	0A

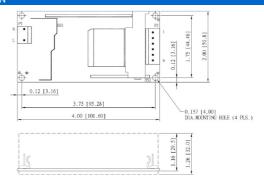
NOTES

1. Safety approvals are for PCB form only. To order models with metallic L-bracket or box, change suffix "A" to "B" for L bracket form, to "C" for enclosed form (see Outline Drawing of Cased Internal Switchers), e.g. PM100-14C.

Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line

voltage and output load ranges, and with a 10 μF tantalum capacitor in parallel with a 0.1 μF ceramic capacitor across the output.

MECHANICAL SPECIFICATION



nis content is subject to change, please refer to specification for more detail. SP reserve the right to change the content without prior notice