Medical PSU
FSP100-1K40M1

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℃
- Low earth leakage current
- EN55011 /55022 class B emissions
- RoHS compliant

SAFETY STANDARD APPAOVAL

WATTAGE

Wattage:	100W

DIMENSION

Dimension:	101.6mm(L) x 50.8mm(W) x 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 Hz

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
Over Current Protection:	All outputs protected to short circuit conditions.

GENERAL SPECIFICATION

Efficiency:	88~90% @ 230 VAC full load
Inrush Current:	40A @ 115 VAC or 80A @ 230 VAC, at 25"C cold start

ENVIRONMENTAL SPECIFICATION

TEMP.Range:	Operating Temperature:-10°C to +70°C Storage Temperature: -40°C to + 85℃
MTBF:	270,000 hours at full load at 25"C ambient temperature calculated per MIL-HDBK-217F

*Output Voltage and Current Rating

	+24V
Ripple-Noise(R-P) mV	240mV
Regulation Load %	±2%
Output Max.(A)	4.2A
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.
2. 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