PEAMD50 Power Supply Series (50W)

Electronics POWER PARTNERS

Features:

- Class I and Class II Versions
- BF Rated Class II Version
- <210mW No Load Power Consumption
- LED on Indicator
- Overload Protection
- Short Circuit Protection
- No Load Operation
- 100 % Burn-In/Hi-pot testing
- RoHS Compliant



Description:

The PEAMD50 series of AC/DC switching power supplies are for 50 watts of continuous output power. They are available as Class I or Class II devices with the inlet of the IEC60320/C14 and C8 to mate with an interchangeable cord for world-wide use. All models meet FCC, EN55022, and CISPR22 class B emission limits, and comply with UL, IEC, CE requirements, and more.

| Model | Voltage | Max. Current | Total Power | Load Regulation | Line Regulation | Ripple & Noise (P-P) | Efficiency Level |
|--------------|---------|-----------------|----------------|-----------------|-----------------|-------------------------|---------------------|
| PEAMD50-10 | 5V | 7.00A | 35W | ±5% | ±3% | 100mV | ٧ |
| PEAMD50-11 | 9V | 3.88A | 35W | ±5% | ±3% | 100mV | V |
| PEAMD50-12 | 12V | 4.17A | 50W | ±5% | ±3% | 250mV | VI |
| PEAMD50-13 | 15V | 3.33A | 50W | ±5% | ±3% | 250mV | VI |
| PEAMD50-13-1 | 18V | 2.63A | 47.3W | ±5% | ±3% | 350mV | VI |
| PEAMD50-13-2 | 19V | 2.63A | 50W | ±5% | ±3% | 350mV | VI |
| PEAMD50-14 | 24V | 2.08A | 50W | ±5% | ±3% | 350mV | VI |
| PEAMD50-17 | 36V | 1.38A | 50W | ±5% | ±3% | 500mV | VI |
| PEAMD50-18 | 48V | 1.04A | 50W | ±5% | ±3% | 720mV | VI |

C14 input receptacle

For C8 input receptacle, model numbers are PEAMD50SF. For example, PEAMD50SF-12

For C6 input receptacle, model numbers are PEAMD50S. For example, PEAMD50S-12

For C18 input receptacle, model numbers are PEAMD50F. For example, PEAMD50-12

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| | Specifications | | | |
|---------------------------------|---|--|--|--|
| Input | | | | |
| Input Voltage | 90-264VAC | | | |
| Input Frequency | 47-63Hz | | | |
| Input Current | 1.0A max at 115VAC 0.5A max at 230VAC | | | |
| Inrush Current | <100A at 240VAC, cold start, 25°C | | | |
| | Output | | | |
| Total Output Power | 50W see table for details | | | |
| Output Voltage | See table | | | |
| Hold Up Time | >8.3mS at full load and 115/230VAC line | | | |
| Earth Leakage Current (Class I) | <100uA max. at 264VAC, 60Hz | | | |
| Touch Current | <50uA max. at 264VAC. 60Hz | | | |
| Average Active Efficiency | Meets DOE level VI requirements, except for 5V and 9V models. See models and ratings chart for details. | | | |
| No Load Power Consumption | <210mW | | | |
| Turn on Delay | <3 seconds | | | |
| | Protection Features | | | |
| Overvoltage Protection | 150% Max. of nominal. Cycle AC power to reset after fault is removed | | | |
| Overload Protection | 110-150% of maximum output current. Auto Recovery | | | |
| Short Circuit Protection | Hiccup Mode. Auto Recovery | | | |
| | Environmental | | | |
| Operating Temperature | 0°C to 60°C (Derate output power linearly from 100% at 40°C to 50% at 60°C) | | | |
| Storage Temperature | -20°C to +85°C | | | |
| Humidity | 5% - 90% non-condensing | | | |
| Altitude | <3000m operational | | | |
| G | Seneral Specifications | | | |
| Dimensions | 4.45"(113mm) x 1.93"(49mm) x 1.37"(35mm) | | | |
| Weight | 1lb | | | |
| MTBF | >100,000 hours per MIL-HDBK-217F at full load and 25°C ambient | | | |
| AC Input Receptacle | IEC320 C14, C8 | | | |
| DC output Plug | 2.5x5.5mm barrel connector | | | |

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| Specifications Continued | | | | | | |
|---|--|--|--|--|--|--|
| Safety | | | | | | |
| Approved to USA/Canada | ANSI/AAMI ES60601-1 cUL ES60601-1 | | | | | |
| Approved to Europe | TUV EN60601-1 3rd edition CB Report | | | | | |
| Isolation | 4000VAC input to output, 2 x MOPP 1500 VAC input to ground,1 x MOPP | | | | | |
| *Consult with TT Electronics for information on | additional country safety approvals | | | | | |
| | EMC | | | | | |
| Emissions | FCC Class B Radiated & Conducted CISPR11 Class B Radiated & Conducted EN55011 Class B Radiated & Conducted | | | | | |
| Harmonic Currents | IEC 61000-3-2 | | | | | |
| Voltage Flicker | IEC 61000-3-3 | | | | | |
| Electrostatic Discharge | IEC 61000-4-2: ±15kV Air, ±8kV contact | | | | | |
| Radiated Immunity | IEC 61000-4-3: 10V/m | | | | | |
| EFT/Burst | IEC 61000-4-4: ±2kV | | | | | |
| Surge Immunity | IEC 61000-4-5: 1kV diff, 2kV com | | | | | |
| Conducted Immunity | IEC 61000-4-6: 10Vrms | | | | | |
| Magnetic Field | IEC 61000-4-8: 30A/m | | | | | |
| Dips/Interruptions | IEC 61000-4-11: Voltage dip immunity, 30% reduction for 500ms, 100% reduction for 10ms | | | | | |



Diagrams



