

PEAMD50 Power Supply Series (50W)

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 Part 15, EN55011/EN55032, and CISPR11/CISPR32 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	V
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

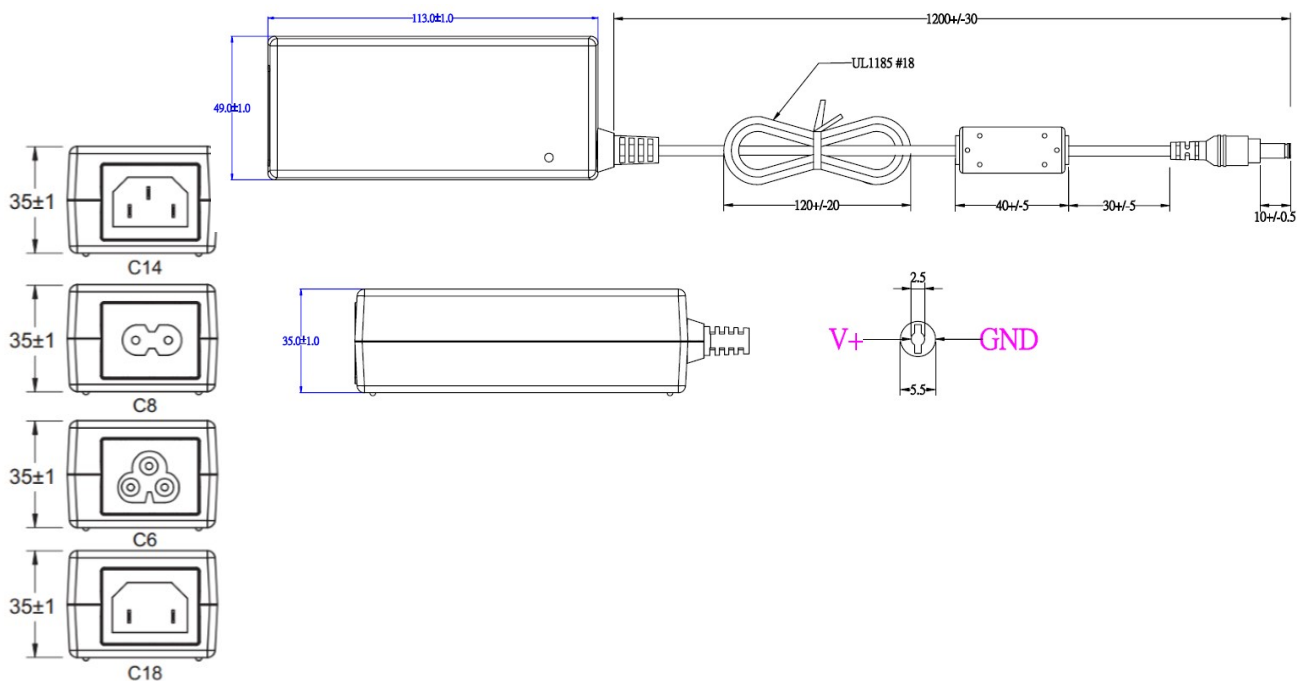
For C6 input receptacle, model numbers are PEAMD50S. For example, PEAMD50S-12

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

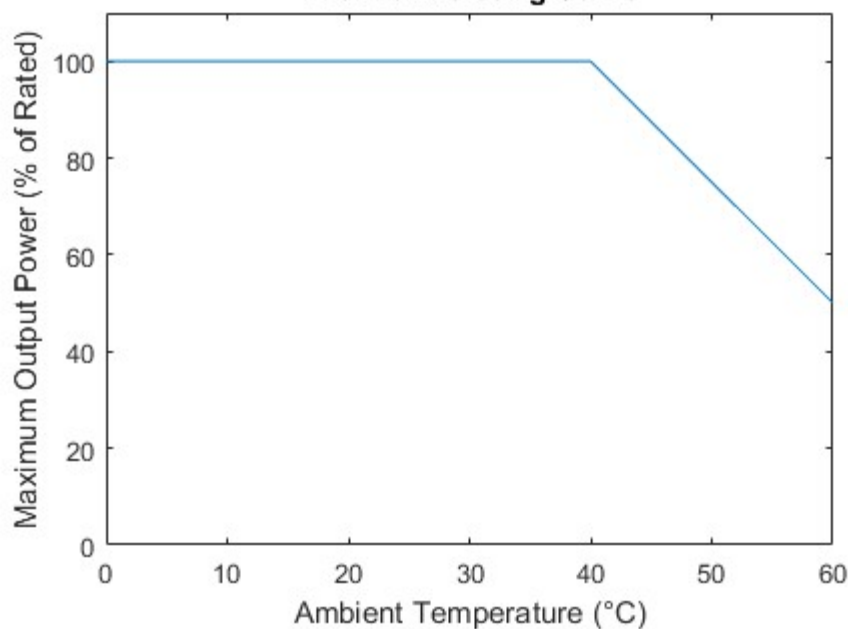
Specifications	
Input	
Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	1.0A max at 115VAC 0.5A max at 230VAC
Inrush Current	<100A at 240VAC, cold start, 25°C
Output	
Total Output Power	50W see table for details
Output Voltage	See table
Hold Up Time	>8.3mS at full load and 115/230VAC line
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	10% - 90% non-condensing
Altitude	<3000m operational
General Specifications	
Dimensions	4.45"(113mm) x 1.93"(49mm) x 1.37"(35mm)
Weight	0.66lb
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient
AC Input Receptacle	IEC320 C14, C8, C18, C6
DC output Plug	2.5x5.5mm barrel connector

Specifications Continued	
Safety	
Approved to USA/Canada	UL/cUL ES60601-1 UL/cUL 62368-1
Approved to Europe	TUV EN60601-1 TUV EN62368-1 CB IEC 60601-1 CB IEC 62368-1
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 Part 15 Class B Radiated & Conducted CISPR11/CISPR32 Class B Radiated & Conducted EN55011/EN55032 Class B Radiated & Conducted EN55035
Harmonic Currents Voltage Flicker Electrostatic Discharge Radiated Immunity EFT/Burst Surge Immunity Conducted Immunity Magnetic Field Dips/Interruptions	IEC 61000-3-2 IEC 61000-3-3 IEC 61000-4-2: ±15kV Air, ±8kV contact IEC 61000-4-3: 10V/m IEC 61000-4-4: ±2kV IEC 61000-4-5: 1kV diff, 2kV com IEC 61000-4-6: 10Vrms IEC 61000-4-8: 30A/m IEC 61000-4-11: Voltage dip immunity, 30% reduction for 500ms, 100% reduction for 10ms

Diagrams



Thermal Derating Curve



Issue	Change Description	Approval	Date
1	TR Created		04/02/2020
2	TR AMENDED- ADDED IMAGE		
3	TR AMENDED—EDITED ALLIGNMENTS ON TABLES/ FORMAT OF DATA WITHIN THE SPEC		18/02/2020
4	TR AMENDED- EDITED TITLE AND FORMATTED TABLE		28/02/2020
5	TR AMENDED- EDITED POWER PARTNERS LOGO		02/03/2020
6	TR AMENDED		03/03/2020
7	Mw logo/diagram		7/5/2020
8	Changed Specifications table to match datasheet. Added mm to dimensions.	KB	5/27/2020
9	Image change and layout edits		14/7/2020
10	EMC standard fix (ITE to MED) on description. Address change.	MM	2/15/2024