

# PSAD36B Power Supply Series (36W)

## Features:

- Class II Configuration
- Efficiency Level VI
- <100mW No Load Power Consumption
- Short Circuit Protection
- Overload Protection
- No Load Operation



## Description:

The PSAD36B series of AC/DC switching power supplies are for 20-36 watts of continuous output power. They are Class II devices with the inlet of the IEC320/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, DOE level VI, CE, and more.

Model	Output Voltage	Current	Total Power	Output Regulation	Ripple & Noise (Vp-p) <sup>2</sup>	Efficiency Level
PSAD36BSF-10-B2 <sup>1</sup>	5V	4A	20W	±5%	200mV	VI
PSAD36BSF-11-B2	9V	4A	36W	±5%	200mV	VI
PSAD36BSF-12-B2	12V	3A	36W	±5%	200mV	VI
PSAD36BSF-13-B2	15V	2.4A	36W	±5%	200mV	VI
PSAD36BSF-13-1-B2	18V	2A	36W	±5%	200mV	VI
PSAD36BSF-13-2-B2	19V	1.89A	36W	±5%	200mV	VI
PSAD36BSF-14-B2	24V	1.5A	36W	±5%	200mV	VI
PSAD36BSF-17-B2	36V	1A	36W	±5%	200mV	VI

1. Notes:

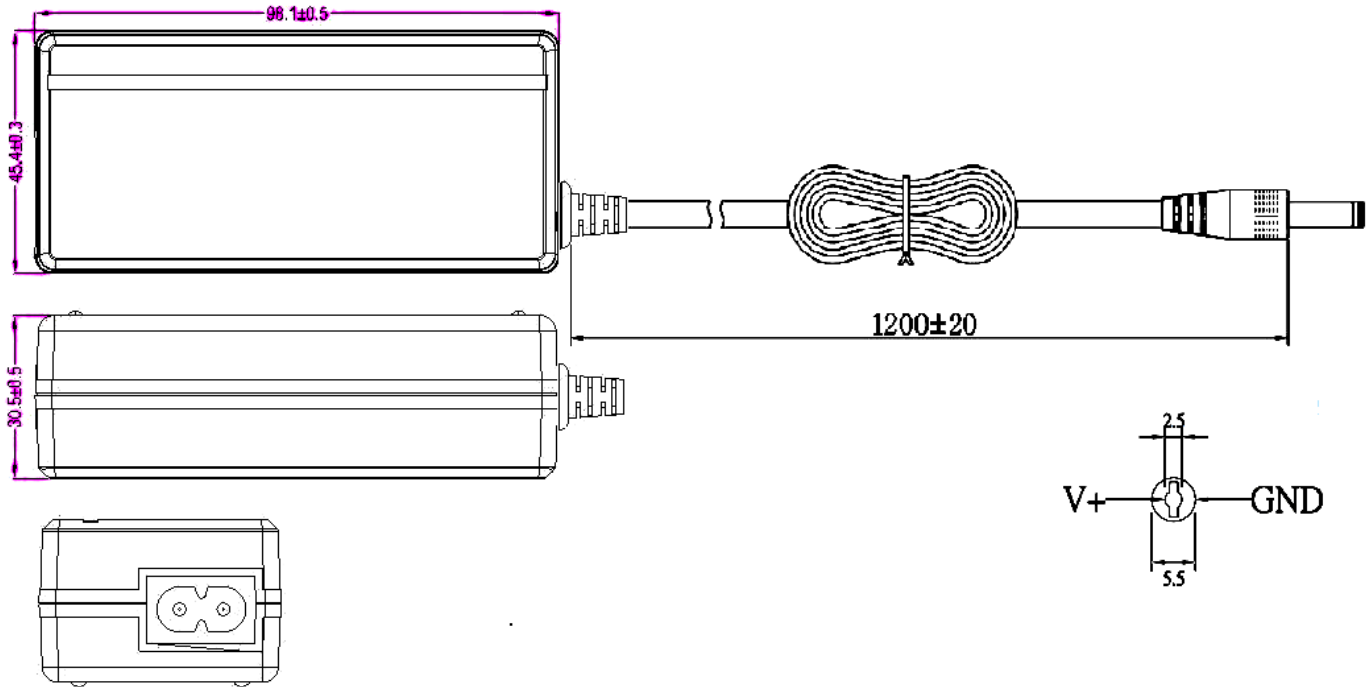
PSAD36BSF-10-B2 is equipped with a 1m output cable. All other models are equipped with a 1.2m output cable as standard.

2. Ripple and noise is measured at output within 20MHz bandwidth, at rated line voltage and full load, with a 10 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

<b>Specifications</b>	
<b>Input</b>	
Input Voltage	90-264VAC
Input Frequency	47-63Hz
Input Current	1.3A Max
Inrush Current	<40A peak @ 264VAC, cold start at 25°C
No Load Power Consumption	< 100mW, meets DOE level VI Requirements
<b>Output</b>	
Total Output Power	36W
Turn On Time	<3S @ 100-200VAC input & full output load
Rise Time	20mS max. @ full load
Fall Time	20mS max. @ full load
Line Regulation	± 1% of rated output voltage at full load
Load Regulation	± 5% of rated voltage from 0 to full load
Transient Response	Maximum voltage excursion of 5% for 25% load change with 0.25A/μS slew rate
Efficiency	Meets DOE level VI requirements
<b>Protection Features</b>	
Short Circuit Protection	Hiccup mode. Auto recovery
Overcurrent Protection	150-200% of rated current. Auto-restart when fault removed
Ingress	IP22 Compliant
<b>Environmental</b>	
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 +80°C
Humidity	10% - 90% non-condensing
<b>General Specifications</b>	
Dimensions	3.78"(96.1mm) x 1.79"(45.4mm) x 1.20"(30.5mm)
AC Input	IEC 320 C8 Inlet
Output Plug	Barrel Type: 5.5mm x 2.5mm x 10mm Center positive (others available)
Weight	0.44 pounds
MTBF	>100,000 hours per MIL-HDBK-217F at full load and 25°C ambient

<b>Specifications Continued</b>	
<b>Safety</b>	
Approved to USA/Canada	UL60950-1 cUL60950-1
Approved to Europe	CB Report CE Report
*Consult with TT Electronics for information on additional country safety approvals	
<b>EMC</b>	
EMC (IEC60601-1-2:2014)	FCC Class B Radiated & Conducted CISPR22 Class B Radiated & Conducted EN55022 Class B Radiated & Conducted
Harmonic Currents	IEC 61000-3-2
Voltage Flicker	IEC 61000-3-3
Electrostatic Discharge	IEC 61000-4-2: ±8 KV air, ±4 KV contact
Radiated Immunity	IEC 61000-4-3: 3V/m
EFT	IEC 61000-4-4: ±1 KV
Surge Immunity	IEC 61000-4-5: ±1 KV differential mode
Conducted Immunity	IEC 61000-4-6: 3Vrms
Power Frequency Magnetic Field Immunity	IEC 61000-4-8: 1A/m
Dips/Interruptions	IEC 61000-4-11: 30% reduction for 500 ms, and >95% reduction for 10 ms

Diagrams



Thermal Derating Curve

