

PSAW6NA Power Supply Series (6W)



Features:

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



Description:

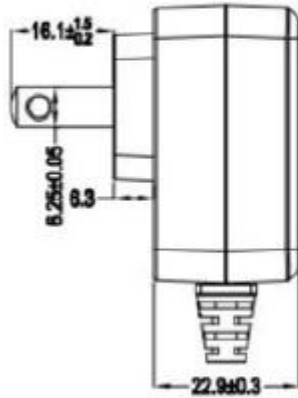
The PSAW6NA series of AC/DC wall mount switching power supplies provide 2.5-6 watts of continuous power. They are Class II devices with fixed AC blades that are optimized for standard North American outlets. All models meet FCC class B emission limits, and comply with UL, IEC, DOE level VI, and more.

| Model Number | Voltage | Current | Total Power | Output Regulation | Ripple & Noise (P-P) | Efficiency Level |
|----------------|---------|---------|-------------|-------------------|----------------------|------------------|
| PSAW6NA-10-B1 | 5VDC | 500mA | 2.5W | ±5% | 30mV | VI |
| PSAW6NA-10A-B1 | 5VDC | 1000mA | 5W | ±5% | 40mV | VI |
| PSAW6NA-10B-B1 | 5VDC | 1200mA | 6W | ±5% | 50mV | VI |
| PSAW6NA-11-B1 | 9VDC | 670mA | 6W | ±5% | 70mV | VI |
| PSAW6NA-12-B1 | 12VDC | 500mA | 6W | ±5% | 50mV | VI |
| PSAW6NA-14-B1 | 24VDC | 250mA | 6W | ±5% | 50mV | VI |

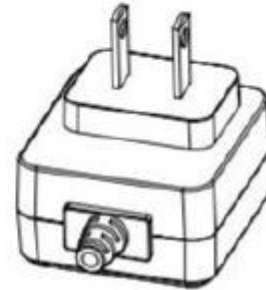
| Specifications | |
|-------------------------------|--|
| Input | |
| Input Voltage | 90-264VAC |
| Input Frequency | 47-63Hz |
| Input Current | 1.2A @ 115VAC 0.6A @ 230VAC |
| Safety Isolation | 3000VAC Input to Output |
| Inrush Current | <40A peak @ 115VAC, cold start at 25°C <40A peak @ 230VAC, cold start at 25°C |
| No Load Power Consumption | <100mW |
| Output | |
| Total Output | see table for details |
| Output Voltage | see table for details |
| Hold Up Time | >8.3 msec @ full load and 115VAC/60Hz input |
| Turn On Time | <30msec |
| Minimum Load | No minimum load requirement |
| Line Regulation | <±1% of rated output voltage at full load |
| Load Regulation | <±5% of rated output voltage at full load |
| Efficiency | Meets DOE level VI requirements |
| Protection Features | |
| Overcurrent Protection | Auto-restart when fault removed. |
| Short Circuit Protection | Hiccup Mode. Auto Recovery |
| Overvoltage Protection | Latching mode. Cycle AC for recovery. |
| Environmental | |
| Operating Temperature | 10°C to 40°C (Derate output power linearly from 100% at 40°C to 50% at 60°C) |
| Storage Temperature | -20°C to +80°C |
| Operational Altitude | <3000m |
| Operating Humidity | 5% - 90% non-condensing |
| General Specifications | |
| Dimensions | 2.24"(43.6mm) x 1.51"(40.9mm) x 1.05"(22.9mm) |
| Weight | 0.15lbs |
| MTBF | >100,000 hours per MIL-HDBK-217F at full load and 25°C ambient |
| AC Input Receptacle | Fixed Non-polarized North American AC Blade (others available) |
| DC output Plug | Barrel Type: 5.5mm x 2.5mm x 9.5mm Center positive (others available) |

| Specifications Continued | |
|---|--|
| Safety | |
| Approved to USA/Canada | UL60950-1 Cul60950-1 |
| *Consult with TT Electronics for information on additional country safety approvals | |
| EMC | |
| EMC | 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: 8kV Air, 4kV contact |
| Radiated Immunity | IEC 61000-4-3: 3V/m |
| EFT/Burst | IEC 61000-4-4: ±1kV |
| Surge Immunity | IEC 61000-4-5: 2005 1kV diff, 2kV com |
| Conducted Immunity | IEC 61000-4-6: 3Vrms |
| Magnetic Field | IEC 61000-4-8: 1A/m |
| Dips/Interruptions | IEC 61000-4-11: 30% reduction for 500ms, >95% reduction for 10ms |

Mechanical Outline



Diagrams



Thermal Derating Curve

