



BIAS Power Technology, Inc.

The Source for Efficient Modular Standby Power

1/4 & 1/2 Watt BIAS Power Supplies

The BIAS Power Supply represents a dramatic breakthrough in power supply design technology that delivers a low-cost, reliable solution for efficient standby power. It can be used worldwide in consumer or commercial products to reduce standby power consumption and product costs. The power supply is fully potted, rugged, and is ready to meet the needs of the new energy efficient products.

The BIAS Power Supply is an off-line AC/DC switching power converter which operates from 85 to 265 VAC input voltage and provides 250/500 milliwatts of isolated DC power at the output. By using patented, cost-effective, line-synchronous switching technology, conducted EMI is virtually eliminated (no external EMI filter components) while efficiency is maintained at greater than 50%. The low-cost, high efficiency and small size make the BIAS Power Supply an ideal drop-in replacement for conventional linear transformer or capacitor coupled supplies.

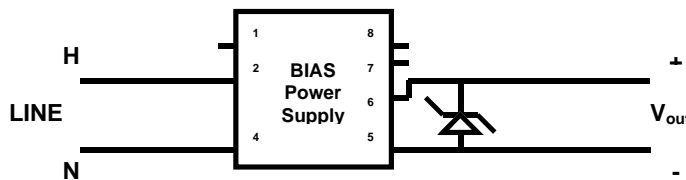
► BIAS Modular Power Supply Advantages

- ▲ Low Cost
- ▲ 50%+ Efficient
- ▲ Universal Input (85-265 VAC)
- ▲ Small Size (1 cubic inch)
- ▲ Low Input Power (<1 watt)
- ▲ Rugged
- ▲ Meets Class B EMI Specifications
- ▲ Satisfies 1 Watt Proposals
- ▲ Isolated DC Power Output
- ▲ NO EMI Filter Required
- ▲ Modular Plug-in Design
- ▲ No Design Cycle
- ▲ UL/CSA/VDE Agency Approvals

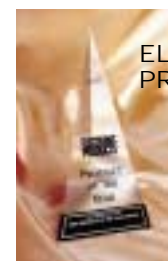
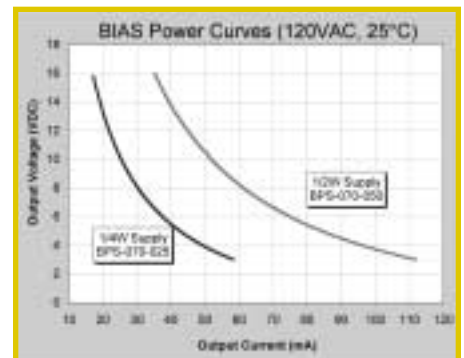


► BIAS Power Supply

This practical, cost effective device provides the solution to the fastest growing segment of electrical power consumption in the western world, electronic devices in standby mode.



BIAS power supplies offer constant power. Zener diode across the output may be used for voltage regulation and over voltage protection. Refer to Applications Notes on the website for details.



ELECTRONIC PRODUCTS

Product of the Year 2000



BIAS Power Technology, Inc.

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► Operating Specifications (@ 25° C and 120 VAC/60Hz Input, unless otherwise noted)

Model	BPS-070-025 (1/4 W)	BPS-070-050** (1/2 W)
Input Voltage Range	85 to 265 VAC	85 to 265 VAC
Input Frequency Range	47 to 63 Hz	47 to 63 Hz
Output Power	250 mW min. @ 12 VDC	500 mW min. @ 12 VDC
Efficiency	50% Minimum	50% Minimum
Line Voltage Regulation	- 2% @ 85 VAC + 4% @ 265 VAC	- 4% @ 85 VAC + 8% @ 265 VAC
Output Voltage Range	3-16 VDC ¹	3-16 VDC ¹
Isolation	3000 VAC	3000 VAC
Output Short Circuit Duration	Continuous	Continuous
Operating Temperature – Standard	0° C to 70° C	0° C to 70° C
Operating Temperature – Extended	-20° C to 70° C ²	-20° C to 70° C ²
Storage Temperature	-40° C to 85° C	-40° C to 85° C
Cooling	Free Air Convection	Free Air Convection
Package Size (LxWxH)	1.07 x 0.9 x 1.05 inch	1.07 x 0.9 x 1.05 inch
Safety Compliance	UL 1950	UL 1950 ³
International Safety Certification	EN 60950 (VDE)	EN 60950 ³
EMI Emissions Class B	EN 55011	EN 55011 ³
EMI Immunity, Industrial 61000-6-2	FCC Part 15 Class B	FCC Part 15 Class B ³
International EFI Compliance	IEC 1000-4-4, Level 4 ⁴	IEC 1000-4-4, Level 4 ⁴

**Preliminary Specifications

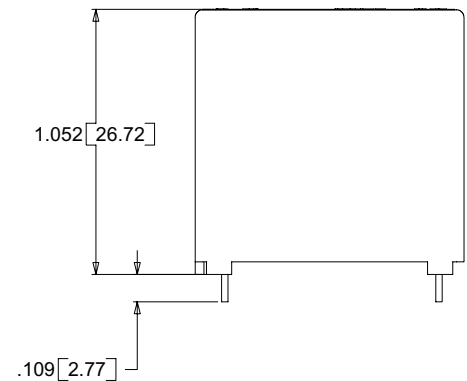
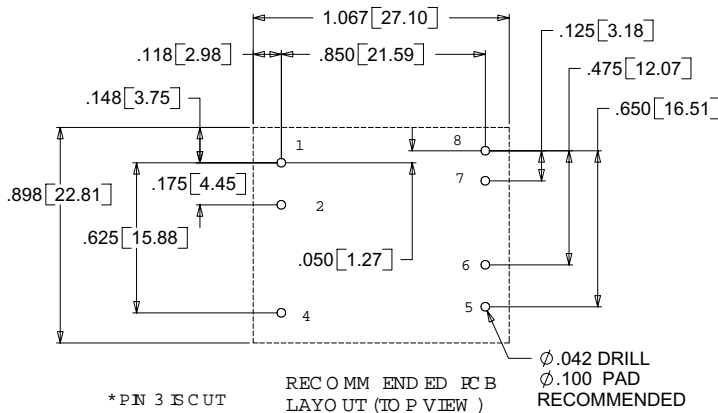
Note 1: Care must be taken, under minimum-load conditions, that the output voltage does not exceed 16 VDC. For load varying applications, a Zener Diode (connected across output pins 5 and 6) is recommended. See Application Note 1, "Over Voltage Protection".

Note 2: Operating temperature range may be extended by including a high voltage, low ESR, bulk capacitor (connected across pins 1 and 2). See Application Note 2, "Extended Low Temperature Operation".

Note 3: Compliance Testing Pending.

Note 4: Unit tested to Level 4 utilizing external TVS device.

**Specifications subject to change.
Contact us or visit our website at
www.biascompany.com for updates
and application notes.**



For more information, please contact your local sales representative or BIAS Power Technology, Inc.

PIN SPECIFICATION

Pin 1	Bulk Cap (+)
Pin 2	AC Line Common
Pin 4	AC Line High
Pin 5	Output (-)
Pin 6	Output (+)
Pin 7	Rectifier Anode
Pin 8	No Connect
Pins are .025[.635] x .025[.635]	