

BIAS Industrial Supply Module BPI 400 Series

The BPI 400 Industrial Power Supply Module is an ideal PCB-mountable AC-to-DC power supply. This low-cost supply provides up to four watts of output power at 12 or 5 VDC (Vo) with an additional auxiliary output of 5 or 3.3 VDC (Vr) to power standby functions such as a clock, microprocessor or remote control sensor. Incorporating a custom integrated circuit into a small package (1.7 in³ [4.32 cm³]) the BIAS Industrial Module provides an immediate “drop-in” solution. No additional external components are required.

Operating Specifications

(@120VAC / 60 Hz / 25°C unless otherwise specified)

Electrical	
Input Voltage Range	85-308 VAC (50/60Hz) 100-430 VDC
Output Power (Pmax)	4.0 W
Efficiency	70% nom.
Output Vo	5 or 12 VDC nom. +/- 5%
Output Vr	3.3 or 5 VDC nom. +/- 5%
Line / Load Regulation Vo, Vr	+/- 1%
Ripple Vo (@130 kHz)	150 mV @ 5 VDC 100 mV @ 12 VDC
Vo max Output Current	800 mA @ 5 VDC 333 mA @ 12 VDC
Vr max Output Current	100 mA @ 3.3 VDC 25 mA @ 5 VDC
No-load Consumption	200 mW typical @ Vin=120 VAC
Isolation	3000 VAC (meets UL / CSA & EN Product Safety)
Short Circuit Protection	Continuous
Reliability @ 25° C	> 200 Khr MTBF
Thermal	
Operating Temperature	-40 to 85° C
Operating Relative Humidity	0 – 95%, non-condensing
Storage Temperature	-40 to 105° C
Mechanical	
Package Size (L x W x H)	1.40 x 1.00 x 1.24 inches [35.6 x 25.4 x 31.5 mm]
Safety	
Safety Compliance	UL/EN60950
EMI Emissions	FCC Part 15, Class B / EN 55022, Class B



Features

- Very low standby <200mW
- Single Component Solution
- 3000 VAC Isolation
- Universal AC Input (85-308 VAC) or 100-430 VDC
- Small Size (1.7 in³ [4.32 cm³])
- FCC Part 15, Class B / EN 55022, Class B
- Meets UL/CSA and EN Product Safety Requirements (ITE)

Specifications subject to change

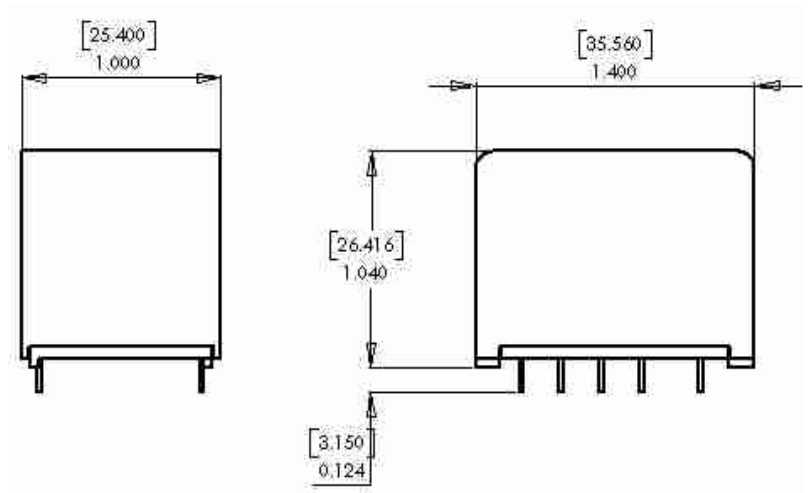


Part Number Designation

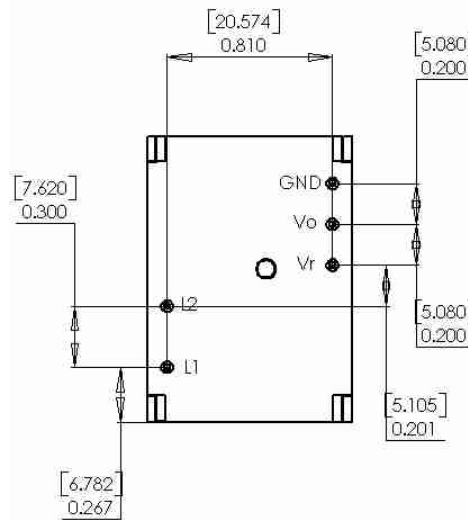
Part Number	Output Configuration	Vo	Vr
BPI 400-05-00	Single output	5 VDC	N/C
BPI 400-05-33	Dual output	5 VDC	3.3 VDC
BPI 400-12-00	Single output	12 VDC	N/C
BPI 400-12-50	Dual output	12 VDC	5 VDC

For custom configurations, contact BIAS Power LLC.

PIN DESIGNATOR	DESCRIPTION
1	Input High
2	Input Low
3	Ground
4	Vo Output
5	Vr Output



- NOTES**
1. Pins 0.025" [0.63 mm] square
 2. Pins extend 0.125" [3.18 mm] below stand-offs
 3. For single output models, the Vr pin is a no connect pin.



BOTTOM VIEW