

BIAS 2 Watt Power Supply

BPS 2 Series Data Sheet

Single (Vo) or Dual (Vo & Vr) output

BPS 2-08-00, -08-33, -08-50
 BPS 2-14-00, -14-33, -14-50
 BPS 2-24-00

The BPS Power Supply Module is an ideal solution for numerous control applications in lighting, sensing, smart building/home and power distribution. This low-cost supply provides up to two watts of output power at 8, 14 or 24VDC (Vo) and an optional 3.3 or 5 VDC (Vr) output for logic functions such as a microprocessor, logic, timing circuits, transceivers or sensors. A patented design incorporating a custom integrated circuit into a small package (0.87 in³ [14.3 cm³]) the BIAS Module provides an immediate "drop-in" solution, requiring no additional external components.

Operating Specifications

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

Electrical	
Input Voltage Range	85 - 265 VAC (50/60Hz)
Input Surge Withstand	308V, < 30 sec
Output Power (Pmax)	2.0 W min. (60Hz) 1.67 W min. (50Hz)
Efficiency	70% nom.
Output Vo (Peak)	8, 14 or 24 VDC nom. +/- 5%
Line / Load Regulation Vo (Peak)	+/- 1% Po < Pmax
Temperature Regulation Vo (Peak)	+/- 2% Po < Pmax
Ripple Vo (@120 Hz) (@ 100 kHz)	1.00 V p:p 0.25 V p:p
Output Vr, 3.3 volt (+/- 5%)	For Vo = 8V, Ir out 160mA max, Io+Ir ≤ 250mA* For Vo = 14V, Ir out 70mA max, Io+Ir ≤ 143mA*
Output Vr, 5.0 volt (+/- 5%)	For Vo = 8V, Ir out 250mA max, Io+Ir ≤ 250mA* For Vo = 14V, Ir out 83mA max, Io+Ir ≤ 143mA*
No-load Consumption	30 mW typical @ Vin=120 VAC
Isolation	3000 VAC (meets UL / CSA & EN Product Safety)
Earth Leakage @ 120 VAC	< 10 uA
Short Circuit Protection	Continuous, Pin ≤ 0.6 w @ Vin = 120 VAC
Reliability @ 25° C, MIL HDBK-217F	> 500 Khr MTBF
Thermal	
Operating Temperature	-30 to +70° C
Operating Relative Humidity	0 – 95%, non-condensing
Storage Temperature	-40 to +105° C
Mechanical	
Package Size (L x W x H)	1.35 x 1.12 x 0.58 inches [34.214 x 28.372 x 14.757 mm]
Safety	
Safety Compliance	UL / EN 60950-1 2nd Ed. (CB Report Available)
EMI Emissions	EN 55022, Class B, FCC Part 15, Class B



Actual Size

cNus

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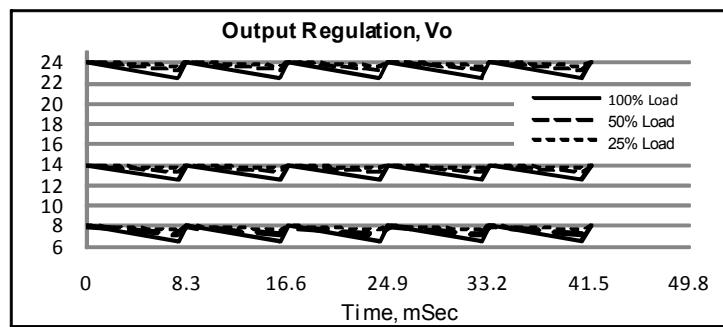
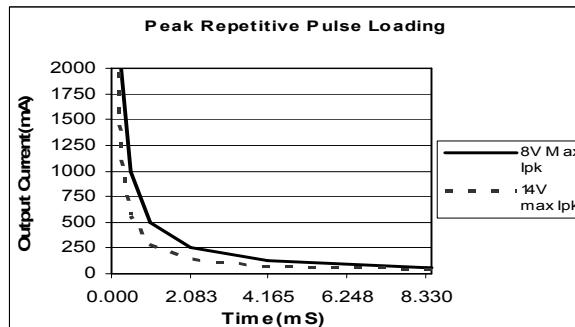
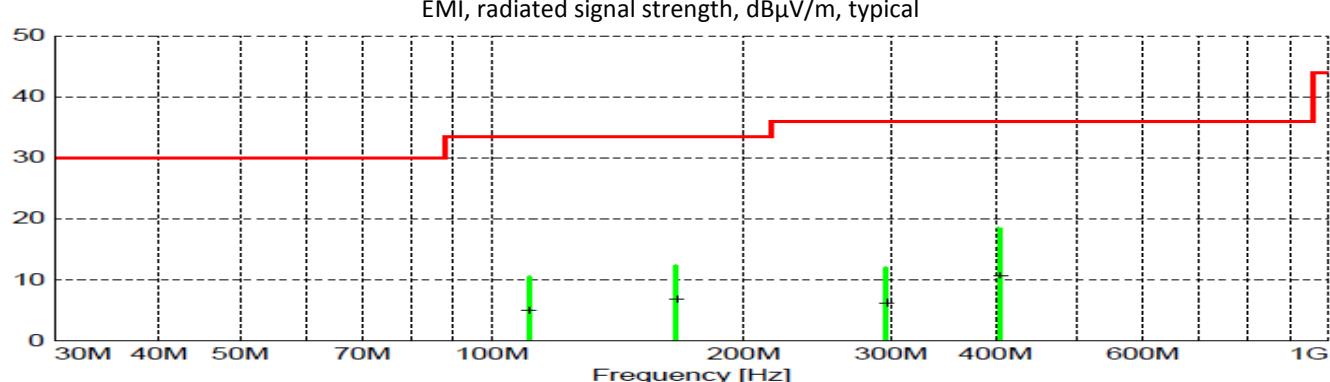
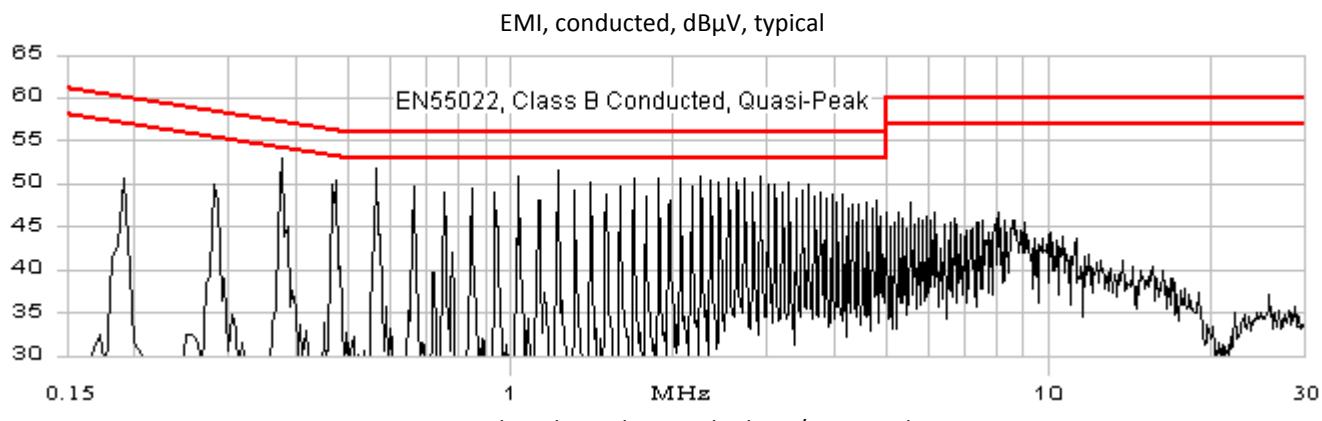
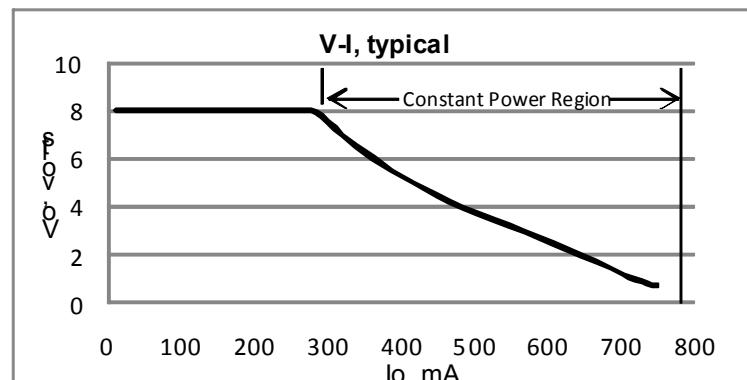
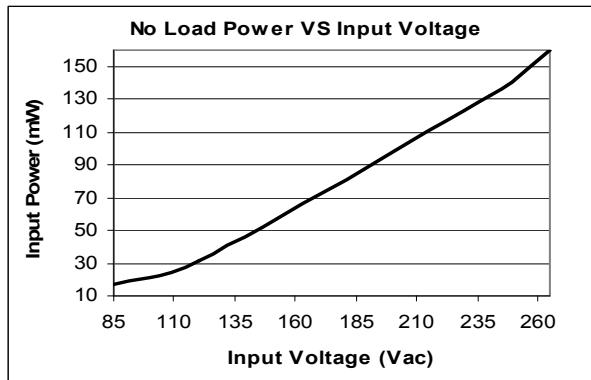


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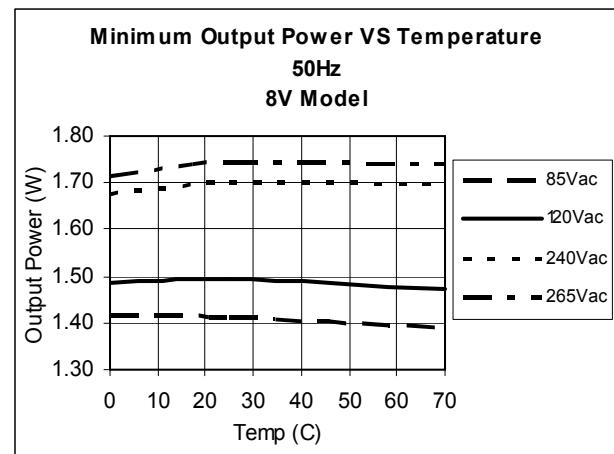
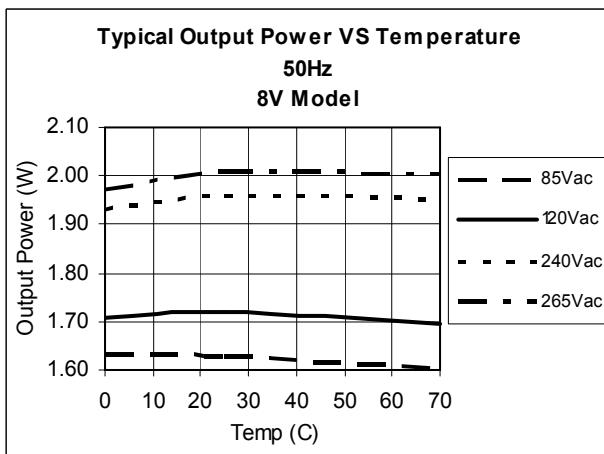
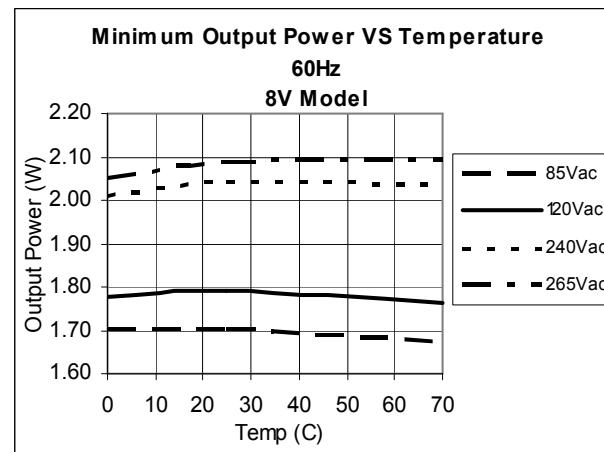
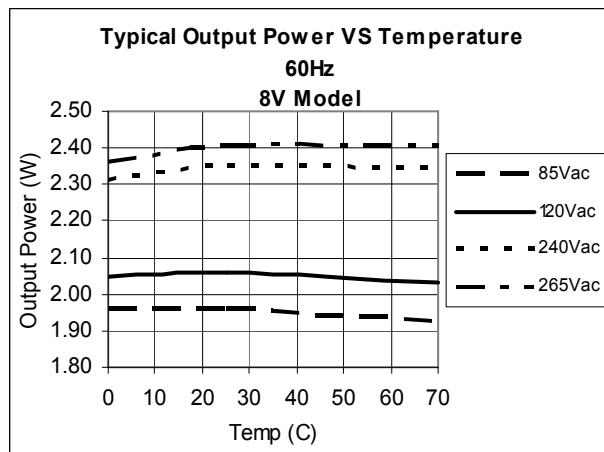


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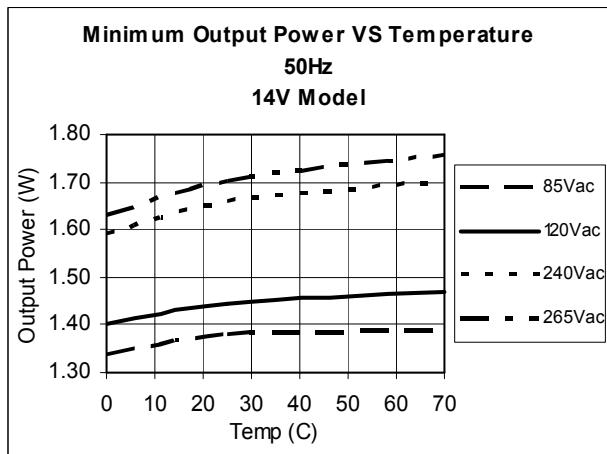
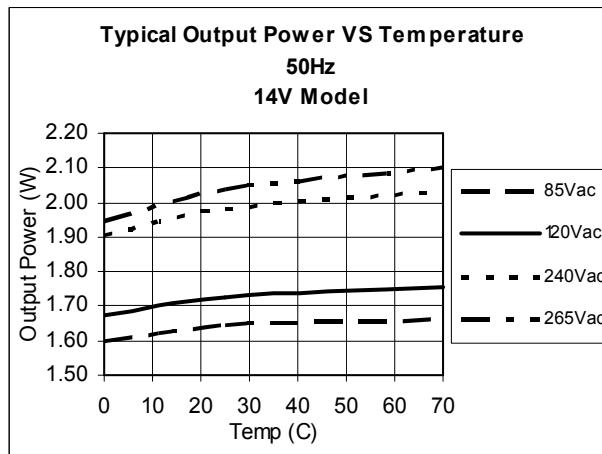
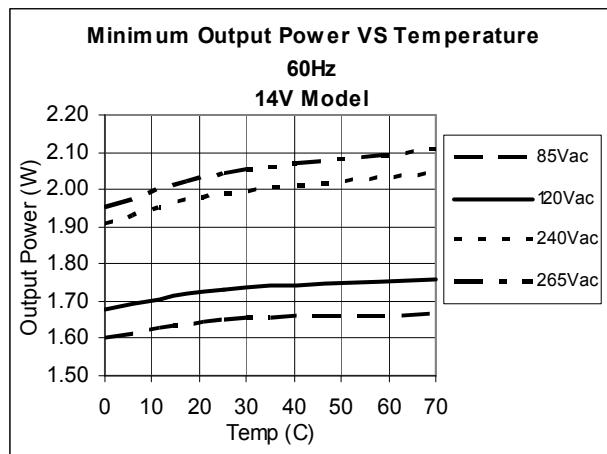
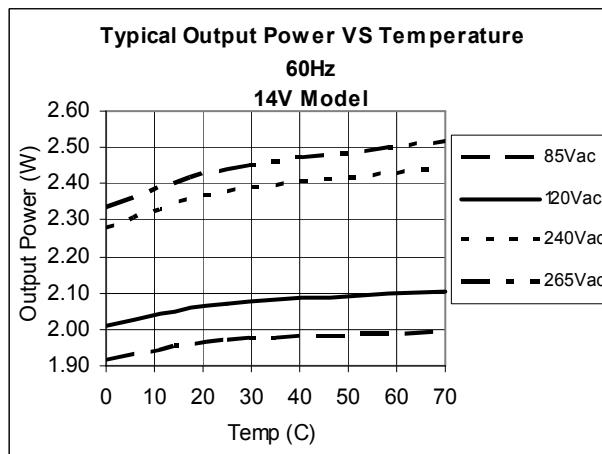


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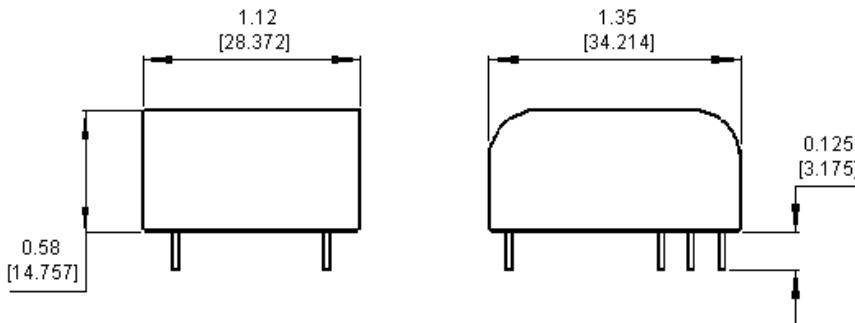
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Part Number Designation

Part Number	Output Configuration	Vo	Vr
BPS 2-08-00	Single output	8 VDC	N/A
BPS 2-14-00	Single output	14 VDC	N/A
BPS 2-24-00	Single output	24 VDC	N/A
BPS 2-08-33	Dual Output	8 VDC	3.3 VDC
BPS 2-08-50	Dual Output	8 VDC	5 VDC
BPS 2-14-33	Dual Output	14 VDC	3.3 VDC
BPS 2-14-50	Dual Output	14 VDC	5 VDC

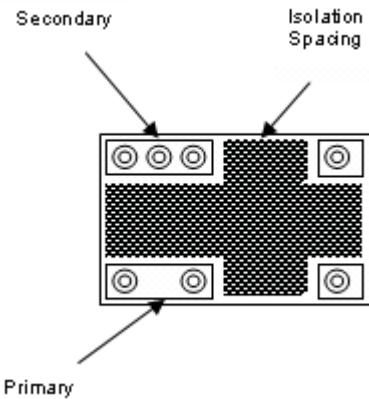
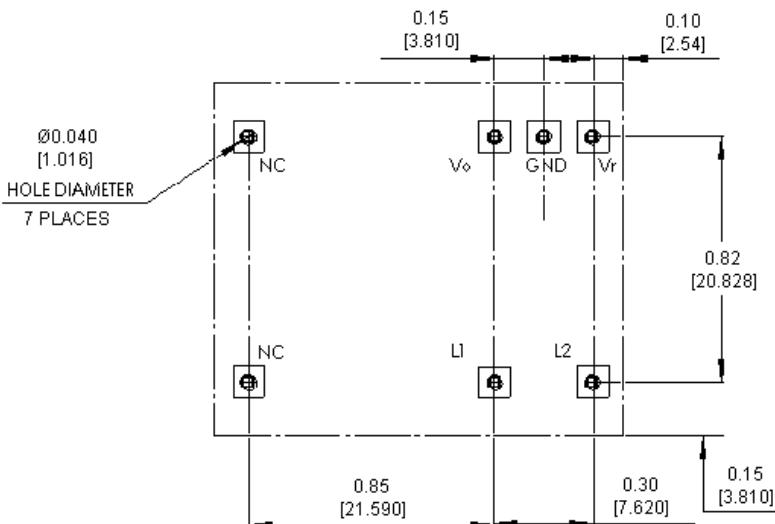
For custom configurations, contact BIAS Power.



PIN DESIGNATOR	DESCRIPTION
L1	Input High
L2	Input Low
N/C	No Connection
Vo	Output
GND	Ground
Vr	Vr Output
N/C	No Connection

Isolation, Bottom View

Recommended Land Pattern, top view



NOTES

1. Pins 0.031" [0.787 mm] round
2. Pins extend 0.125" [3.175 mm] below stand-offs

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

BIAS Power:

[BPS 2-05-00](#) [BPS 2-05-33](#) [BPS 2-08-00](#) [BPS 2-08-33](#) [BPS 2-08-50](#) [BPS 2-12-00](#) [BPS 2-12-33](#) [BPS 2-12-50](#)
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