

B15 Series

15W AC/DC Power Module

Description

The B15 series of the efficiency, AC/DC power modules offer 85-265V AC input and 15W DC output within small footprint. With a wide input voltage range of 85-265Vac they are available with an output voltage of either 3.3, 5, 12, 15, or 24Vdc. All models feature an input filter, output current limiting and short circuit protection. The fully enclosed, encapsulated construction heat spreader design achieves very efficient heat transfer with no hot spots. The modules combine creative design concepts with highly derated power devices to achieve very high reliability, high performance and low cost solution to systems designers that are challenged to maximize power and minimize board space.



Features

- Delivers up to 15W with AC input in 2.0"x 3.0" format
- No airflow or heatsink required
- Low profile of only 0.89"
- 3.3V, 5V, 12V, 15V, 24V or Dual output modules
- -20°C to +71 °C ambient operation
- Meets Basic Insulation requirements of EN60950
- UL 1950 recognized and TUV IEC60950
- Meets conducted limits of EN55022 and EN50082-1

Applications

- Telecommunications
- Data Communications
- Wireless Communications
- Networking Gear
- Servers, Switches and Data Storage
- Semiconductor Test Equipment
- Distributed Power Architecture

Specification Summary

- 4A @ 3.3V, 3A @ 5V, 1.25A @ 12V, 1A @ 15V, 0.625 A @ 24 V, ±0.625A @ ±12V, ±0.5A @ ±15V, 3A @ 3.3V and 1A @ 5V,
- Tightly output regulation, typical ±2%
- No minimum load required
- Ripple & Noise (20Mhz BW) 100 mv typ.(pk-pk)
- Wide input operating range 85-265Vac
- 1500V, 10M input-to-output isolation
- Enclosed construction with heat spreader for low temperature rise
- Enclosed six-sided metal shield construction for low EMI/RFI
- Output overcurrent protection
- Input Under voltage protection
- MTBF of 245,000 hours @ 50°C (MIL-HDBK-217)

Part Number and Selection Information

Model	Input				Output		Efficiency 75% Load
	Voltage (Vac)		Current (Aac)		Voltage	Current	
Part Number	Nominal	Range	No load	Full load	(Vdc)	(Adc)	(%)
B15-AC-3.3	110/220	85-265	0.01	0.16/0.08	3.3	4.0	70
B15-AC-5	110/220	85-265	0.01	0.18/0.10	5.0	3.0	74
B15-AC-12	110/220	85-265	0.01	0.18/0.10	12	1.25	80
B15-AC-15	110/220	85-265	0.01	0.18/0.10	15	1.0	80
B15-AC-24	110/220	85-265	0.01	0.18/0.10	24	0.625	80
B15-AC-12D	110/220	85-265	0.01	0.18/0.10	±12	±0.625	79
B15-AC-15D	110/220	85-265	0.01	0.18/0.10	±15	±0.50	78
B15-AC-335D	110/220	85-265	0.01	0.18/0.10	3.3 / 5.0	3.0 / 1.0	74

Typical at Ta= +25 °C under nominal line voltage and 75% load conditions, unless noted.

Outline Information and Pin-out

Pin Connection (Function)		
Pin#	Single Output	Dual Output
1	AC In	AC In
2	AC In	AC In
3	Vout -	Vout 2 / Vo -
4	Trim	No Pin
5	No Pin	Com
6	Vout +	Vout 1 / Vo +

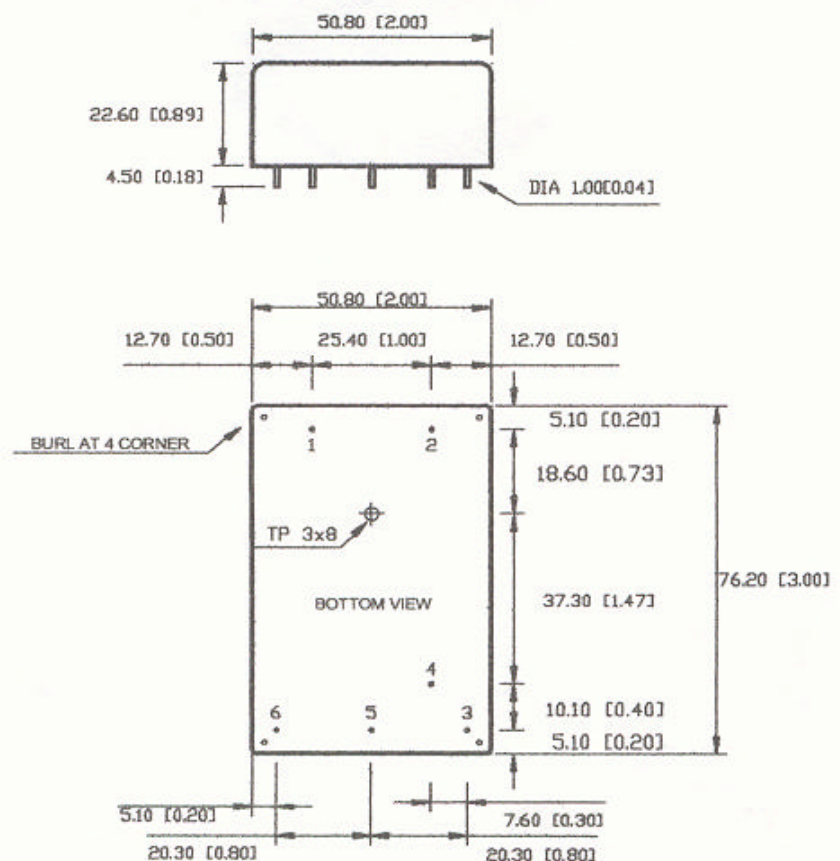
All dimensions are in inches [mm]

All pins are dia. 0.040 [1.02]

Pin material: Brass

Case: Plastic

Weight: 160 g



The information and specifications contained in this brief are believed to be accurate and reliable at the time of publication. Specifications are subject to change without notice. Refer to product specification sheet for performance characteristics and application guidelines.

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