

## International Power Sources, Inc.

260 Hopping Brook Road  
 Holliston, Massachusetts 01746  
 Tel. (508) 429-4440 Fax (800) 226-2100  
<http://www.intlpower.com>

## DC/DC Converters



### BA/BC Series: 1.5 - 6.0 Watts Single and Dual Outputs

### FEATURES

- Input  $\pi$  Filter
- Fully Regulated Outputs
- Industry Standard Pinouts
- 5, 12, 24, 28, and 48 VDC Inputs
- Ripple and Noise Less Than 50mVpp
- Input/Output Isolation

### Ordering Guide: Series/Input Code/Output Code

Example: BC302 - BC Series, 24 Volt Input, 12 Volt Output @ 0.47A

Series	Output
BA	1.5 Watts
BC	5-6 Watts

Input Code	Input Voltage
	BA/BC Series
1	5 V Nominal
2	12 V Nominal
3	24 V Nominal
4	28 V Nominal
5	48 V Nominal

Output Code	Output Voltage(s)	BA Series	BC Series
		Output Current(s)	Output Current(s)
01	5 VDC	300 mA	1.00 A
02	12 VDC	125 mA	0.47 A
03	15 VDC	100 mA	0.40 A
04	$\pm 12$ VDC	$\pm 60$ mA	$\pm 0.23$ A
05	$\pm 15$ VDC	$\pm 50$ mA	$\pm 0.19$ A

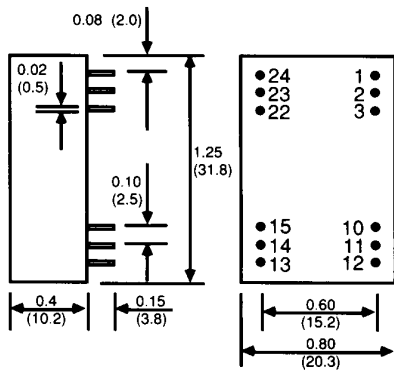
## Electrical Specifications

All specifications typical at nominal line, full load and 25°C

<b>Output Specifications:</b>	<b>BA</b>	<b>BC</b>
Output Voltage Accuracy	±4%	±1%
Line Regulation (Full Input Range)	0.3%	0.02%
Load Regulation (10% to 100% Load)	0.5%	0.05%
Ripple and Noise (DC-20MHz)	50 mVpp*	
Temperature Coefficient	0.02%/°C	
Short Circuit Protection	Short Term	
<b>Input Specifications:</b>		
Input Voltage Range	±10%	See Table
Input Filter	§ Network	
<b>General Specifications:</b>		
Switching Frequency	25 kHz.	
Efficiency	65% Typical	
Isolation Voltage	500 VDC	
Isolation Capacitance/Resistance	30 pF/100MΩ	80pF/100MΩ
Weight	14g/0.5 oz.	60g/2.2 oz.
<b>Environmental Specifications:</b>		
Operating Temperature	-25°C. to +71° C	
Storage Temperature	-40°C. to +100°C.	

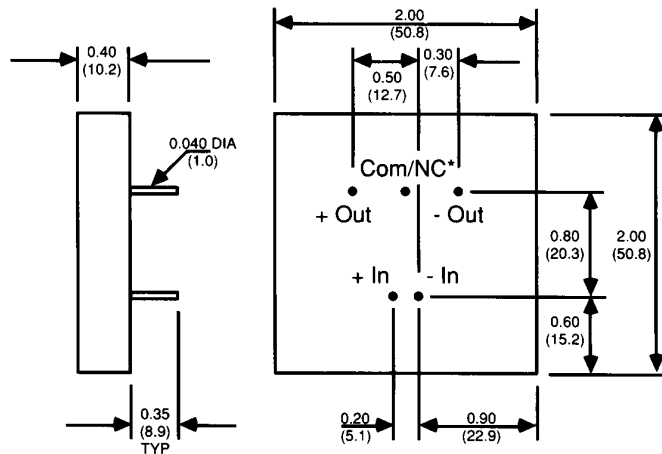
\* Reduced to 20 mVpp with 15µF Tantalum Capacitor Across Outputs.

### BA Series:



(BOTTOM VIEW)

### BC Series:



Pin	Single	Dual
1	+ V Input	+ V Input
2	NC*	- V Input
3	NC*	Common
10	- V Output	Common
11	+ V Output	+ V Output
12	- V Input	- V Input
13	- V Input	- V Input
14	+ V Output	+ V Output
15	- V Output	Common
22	NC*	Common
23	NC*	- V Output
24	+ V Input	+ V Input

### Input Voltage Range vs. Percentages of Rated Output Load (BC Series Only)

Nominal Input Voltage	Rated Output Load		
	60%	80%	100%
5	4.3 - 6.5	4.4 - 6.0	4.5 - 5.5
12	10.5 - 15.6	10.6 - 14.4	10.8 - 13.2
24	21.2 - 31.2	21.4 - 28.8	21.6 - 26.4
28	22.8 - 36.4	24.2 - 33.6	25.2 - 30.8
48	42.2 - 62.4	42.8 - 57.6	43.2 - 52.8

All dimensions in inches (mm)

\* NC (No Connection) on single Output Models