

4BESeries

10W DC-DC Converters

Features

- 10W Isolated Output
- 2:1 Input Range
- 82% Efficiency
- Pi Input Filter
- Low Ripple and Noise
- Continuous Short Circuit Protection
- Conductive EMI Meet EN55022 Class A

| Model Number | Input Voltage | Output Voltage | Output Current | | Input Current | | % Efficiency | Case |
|--------------|---------------|----------------|----------------|----------|---------------|-----------|--------------|------|
| | | | Min. | Max. | No Load | Full Load | | |
| 4BE-01 | 9-18DC | 5 VDC | 100 mA | 2000 mA | 30 mA | 1100 mA | 76 | B |
| 4BE-02 | | 12 VDC | 45 mA | 830 mA | 30 mA | 1065 mA | 78 | |
| 4BE-03 | | 15 VDC | 35 mA | 666 mA | 30 mA | 1065 mA | 78 | |
| 4BE-04 | | ±12 VDC | ±25 mA | ±415 mA | 40 mA | 1065 mA | 78 | |
| 4BE-05 | | ±15 VDC | ±20 mA | ±333 mA | 40 mA | 1065 mA | 78 | |
| 4BE-06 | | ±5 VDC | ±50 mA | ±1000 mA | 40 mA | 1065 mA | 78 | |
| 4BE-11 | 18-36 VDC | 5 VDC | 100 mA | 2000 mA | 20 mA | 535 mA | 78 | B |
| 4BE-12 | | 12 VDC | 45 mA | 830 mA | 20 mA | 520 mA | 80 | |
| 4BE-13 | | 15 VDC | 35 mA | 666 mA | 20 mA | 520 mA | 80 | |
| 4BE-14 | | ±12 VDC | ±25 mA | ±415 mA | 20 mA | 520 mA | 80 | |
| 4BE-15 | | ±15 VDC | ±20 mA | ±333 mA | 20 mA | 520 mA | 80 | |
| 4BE-16 | | ±5 VDC | ±50 mA | ±1000 mA | 20 mA | 520 mA | 80 | |
| 4BE-21 | 36-72 VDC | 5 VDC | 100 mA | 2000 mA | 10 mA | 260 mA | 80 | B |
| 4BE-22 | | 12 VDC | 45 mA | 830 mA | 10 mA | 254 mA | 82 | |
| 4BE-23 | | 15 VDC | 35 mA | 666 mA | 10 mA | 254 mA | 82 | |
| 4BE-24 | | ±12 VDC | ±25 mA | ±415 mA | 10 mA | 254 mA | 82 | |
| 4BE-25 | | ±15 VDC | ±20 mA | ±333 mA | 10 mA | 254 mA | 82 | |
| 4BE-26 | | ±5 VDC | ±50 mA | ±1000 mA | 10 mA | 254 mA | 82 | |

Note: Nominal Input Voltage 12, 24, 28 or 48VDC

Specifications

Input Specifications:

Input Voltage Range.....12V.....9-18V
24V.....18-36V
48V.....36-72V
 Input Filter.....Pi Type

Output Specifications:

Voltage Accuracy.....Single output.....+/- 1.0 % max.
Dual (+/-) output.....+/- 1.0 % max.
 Voltage Balance (Dual).....+/- 1.0 % max.
 Transient Response
 Single 25% Step Load Change.....<500µ sec.
 Dual FL. 1/2L+/-1% Error Band.....<500µ sec
 Ripple & Noise, 20 MHz BW.....100 mV p-p max.
 Temperature Coefficient..... +/- 0.02 % /°C max.
 Short Circuit Protection.....Continuous
 Line Regulation ¹ Single / Dual Output.....+/- 0.2 % max.
 Load Regulation ² Single / Dual Output.....+/- 1 % max.

General Specifications :

Efficiency.....see table
 Isolation Voltage.....500VDCmin
 Isolation Resistance.....100Mohm
 Switching Frequency.....200 KHz, min.
 Operating Temperature Range.....-25° C ~ +71° C
 Case Temperature.....100° C max.
 Cooling.....Free air convection
 Storage Temperature Range.....-40° C ~ +100° C
 EMI / RFI.....Six sided shield
 Dimensions......2" x 1" x 0.4" (50.8 x 25.4 x 10.2 mm)
 Case Material.....Black Coated Copper with
 Non-conducted base

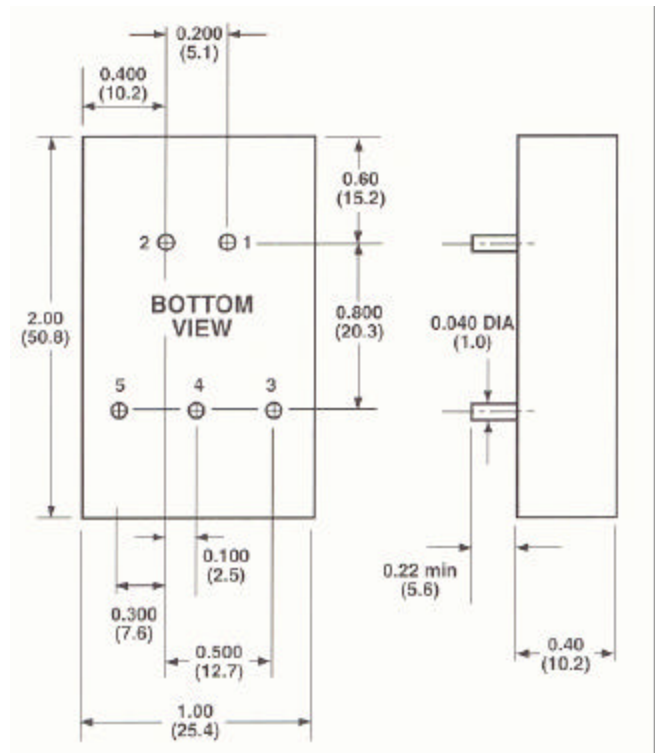
Note:

1. Measured from high line to low line;
2. Measured from full load to ¼load;
3. Minimum load on the output is necessary to maintain regulation

Outline Information and Pin-out

| PIN CONNECTION | |
|----------------|-------------|
| Pin | Function |
| 1 | + Input |
| 2 | - Input |
| 3 | + Output |
| 4 | Common / NP |
| 5 | - Output |

* NP---No Pin On Single Output
 All dimensions are in inches [mm]



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.