

5B

15 WATT WIDE INPUT DC-DC CONVERTERS

Features:

- 15W Isolated output
- Efficiency to 82%
- 2:1 Input Range
- Pi Input Filter
- Continuous Short Circuit Protection
- Conductive EMI Meet EN55022 Class A

| MODEL NUMBER | INPUT VOLTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT | | INPUT CURRENT | | % EFF. | CASE |
|--------------|---------------|----------------|----------------|----------|---------------|-----------|--------|------|
| | | | MIN. | MAX. | NO LOAD | FULL LOAD | | |
| 5B01 | | 5VDC | 150 mA | 3000 mA | 20 mA | 1650 mA | 77 | |
| 5B02 | | 12 VDC | 65 mA | 1250 mA | 20 mA | 1570 mA | 80 | |
| 5B03 | 9-18 VDC | 15 VDC | 50 mA | 1000 mA | 20 mA | 1570 mA | 80 | |
| 5B04 | | ±12 VDC | ±35 mA | ±625 mA | 30 mA | 1570 mA | 80 | B |
| 5B05 | | ±15 VDC | ±25mA | ±500 mA | 30 mA | 1570 mA | 80 | |
| 5B06 | | ±5 VDC | ±75 mA | ±1500 mA | 30 mA | 1570 mA | 80 | |
| 5B07 | | 3.3 VDC | 150 mA | 3000 mA | 20 mA | 1086 mA | 76 | |
| 5B11 | | 5 VDC | 150 mA | 3000 mA | 20 mA | 800 mA | 78 | |
| 5B12 | | 12 VDC | 65 mA | 1250 mA | 20 mA | 780 mA | 80 | |
| 5B13 | | 15 VDC | 50 mA | 1000 mA | 20 mA | 780 mA | 80 | |
| 5B14 | 18-36 VDC | ±12 VDC | ±35 mA | ±625 mA | 30 mA | 780 mA | 80 | |
| 5B15 | | ±15 VDC | ±25 mA | ±500 mA | 30 mA | 780 mA | 80 | |
| 5B16 | | ±5 VDC | ±75 mA | ±1500 mA | 30 mA | 780 mA | 80 | |
| 5B17 | | 3.3 VDC | 150 mA | 3000 mA | 20 mA | 543 mA | 76 | B |
| 5B21 | | 5 VDC | 150mA | 3000 mA | 10 mA | 390 mA | 80 | |
| 5B22 | | 12 VDC | 65 mA | 1250 mA | 10 mA | 380 mA | 82 | |
| 5B23 | | 15 VDC | 50 mA | 1000 mA | 10 mA | 380 mA | 82 | |
| 5B24 | 36-72 VDC | ±12 VDC | ±35 mA | ±625 mA | 15 mA | 380 mA | 82 | |
| 5B25 | | ±15 VDC | ±25 mA | ±500 mA | 15 mA | 380 mA | 82 | |
| 5B26 | | ±5 VDC | ±75 mA | ±1500 mA | 15 mA | 380 mA | 82 | B |
| 5B27 | | 3.3 VDC | 150 mA | 3000 mA | 15 mA | 272 mA | 76 | |

NOTE: 1. Nominal Input Voltage 24 or 48 VDC



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INPUT SPECIFICATIONS:

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

OUTPUT SPECIFICATIONS:

| | | |
|--|--|----------------|
| Voltage Accuracy | | |
| Single Output..... | | ±1.0% max. |
| Dual + Output..... | | ±1.0% max. |
| Dual - Output..... | | ±1.0% max. |
| Voltage Balance (Dual)..... | | ±1.0%/max. |
| Transient Response | | |
| Single 25% Step Load Change..... | | <500µ s. |
| Dual FL, 1/2L ±1% Error Band..... | | <500µ s. |
| Ripple and Noise, 20MHz BW..... | | 100mV 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..... | | ±1.0% max. |

GENERAL SPECIFICATIONS:

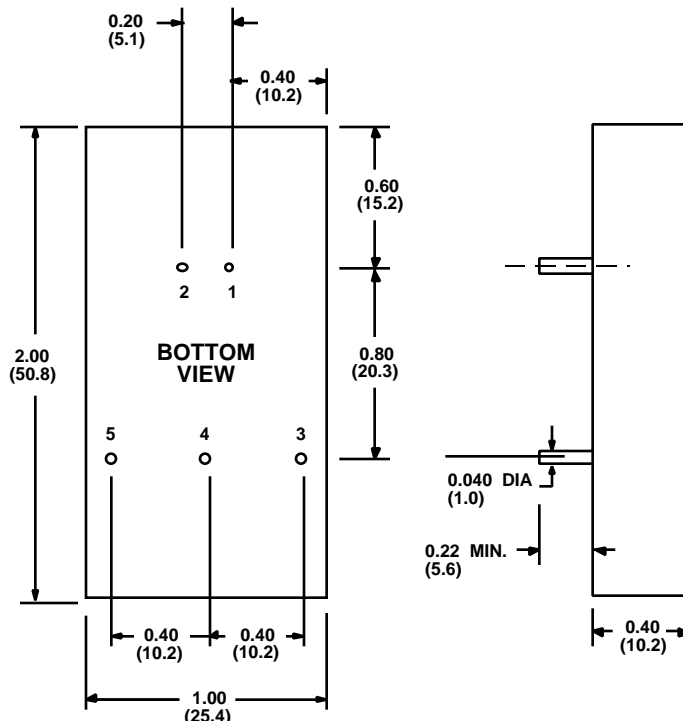
| | | |
|----------------------------------|--|---|
| Efficiency..... | | See Table |
| Isolation Voltage..... | | 500 VDC min. |
| Isolation Resistance..... | | 10 ⁹ ohms |
| Switching Frequency..... | | 200kHz, min. |
| Operating Temperature Range..... | | -25°C to + 71°C |
| Case Temperature..... | | 100°C max. |
| Cooling..... | | Free-Air Convection |
| Storage Temperature Range..... | | -40°C to + 100°C |
| EMI/RFI..... | | Six sided Continuous Shield |
| Dimensions..... | | 2 x 1 x 0.4 inches (50.8 x 25.4 x 10.2 m/m) |
| Case Material..... | | Black Coated Copper with Non-Conductive Base |

NOTE:

1. Measured From High Line to Low Line
2. Measured From Full Load to 1/4 Load
3. A Minimum Load On the Output is Necessary to Maintain Regulation

CASE B

All Dimensions In Inches(mm)



| PIN CONNECTION | |
|----------------|----------|
| Pin | Function |

- | | |
|----|-----------|
| 1. | +Input |
| 2. | -Input |
| 3. | +Output |
| 4. | Common/NP |
| 5. | -Output |

NP*-NO PIN ON SINGLE OUTPUT

All Specifications Typical At Nominal Line, Full Load and 25° C Unless Otherwise Noted.