

B-Series

0.6W - 1W Isolated DC/DC-Converters

- Dual Separate Regulated Output
- 7 Pin SIP and 14 Pin DIP Package
- Low Ripple and Noise
- 1kVDC or 3kVDC Isolation

Selection Guide (See Model Code Information on Page 10)

| Ordering Code | Nominal Input Voltage (VDC) | Input Current | | Output Voltage (VDC) | Output Current (mA) | Efficiency at Full Load (%) |
|---------------|-----------------------------|---------------|----------------|----------------------|---------------------|-----------------------------|
| | | No Load (mA) | Full Load (mA) | | | |

1kVDC Isolation, Dual Separate Output

| | | | | | | | | |
|---------------|----|----|-----|-----|-----|-----|-----|----|
| B-050303D-* | 5 | 20 | 200 | 3 | 3 | 100 | 100 | 60 |
| B-053.33.3D-* | 5 | 22 | 220 | 3.3 | 3.3 | 100 | 100 | 60 |
| B-054.84.8D-* | 5 | 25 | 318 | 4.8 | 4.8 | 100 | 100 | 61 |
| B-050505D-* | 5 | 28 | 313 | 5 | 5 | 100 | 100 | 64 |
| B-120303D-* | 12 | 13 | 83 | 3 | 3 | 100 | 100 | 60 |
| B-123.33.3D-* | 12 | 13 | 92 | 3.3 | 3.3 | 100 | 100 | 60 |
| B-124.84.8D-* | 12 | 16 | 133 | 4.8 | 4.8 | 100 | 100 | 61 |
| B-120505D-* | 12 | 16 | 130 | 5 | 5 | 100 | 100 | 64 |
| B-240303D-* | 24 | 8 | 43 | 3 | 3 | 100 | 100 | 58 |
| B-243.33.3D-* | 24 | 8 | 47 | 3.3 | 3.3 | 100 | 100 | 58 |
| B-244.84.8D-* | 24 | 8 | 64 | 4.8 | 4.8 | 100 | 100 | 63 |
| B-240505D-* | 24 | 8 | 63 | 5 | 5 | 100 | 100 | 66 |

3kVDC Isolation, Dual Separate Output

| | | | | | | | | |
|----------------|----|----|-----|-----|-----|-----|-----|----|
| B-050303DH-* | 5 | 20 | 200 | 3 | 3 | 100 | 100 | 60 |
| B-053.33.3DH-* | 5 | 22 | 220 | 3.3 | 3.3 | 100 | 100 | 60 |
| B-054.84.8DH-* | 5 | 25 | 318 | 4.8 | 4.8 | 100 | 100 | 61 |
| B-050505DH-* | 5 | 28 | 313 | 5 | 5 | 100 | 100 | 64 |
| B-120303DH-* | 12 | 13 | 83 | 3 | 3 | 100 | 100 | 60 |
| B-123.33.3DH-* | 12 | 13 | 92 | 3.3 | 3.3 | 100 | 100 | 60 |
| B-124.84.8DH-* | 12 | 16 | 133 | 4.8 | 4.8 | 100 | 100 | 61 |
| B-120505DH-* | 12 | 16 | 130 | 5 | 5 | 100 | 100 | 64 |
| B-240303DH-* | 24 | 8 | 43 | 3 | 3 | 100 | 100 | 58 |
| B-243.33.3DH-* | 24 | 8 | 47 | 3.3 | 3.3 | 100 | 100 | 58 |
| B-244.84.8DH-* | 24 | 8 | 64 | 4.8 | 4.8 | 100 | 100 | 63 |
| B-240505DH-* | 24 | 8 | 63 | 5 | 5 | 100 | 100 | 66 |

* Select on Inquiry Form SIP7 (Suffix 'S') DIP14 (Suffix 'D') package size, see model code information on page 10.

Continued on next Page.

B-Series

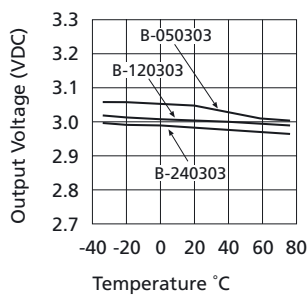
0.6W - 1W Isolated DC/DC-Converters

Specifications – Typical at +25°C, Unless Otherwise Noted

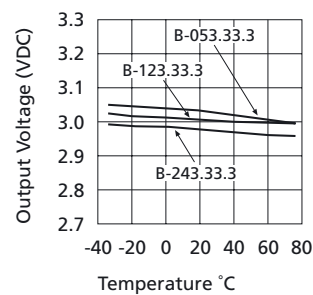
| | | | |
|-----------------------------------|-------------------|-----------------------|--|
| Voltage Range | ±10% | Efficiency | 60% to 75% |
| Filter | Capacitors | Switching Frequency | 45 kHz, Type. |
| Rated Voltage | 1000 VDC min. | Operating Temperature | -40°C to +85°C |
| Leakage Current | 1 mA | | -40°C to +71°C (no derating) |
| Resistance | 10 ⁹ Ω | Storage Temperature | -55°C to +125°C |
| Capacitance | 80 pF, typ. | Derating | None Required |
| Each Voltage Accuracy | ±1%, max. | Humidity | Up to 90%, Non-condensing |
| Each Voltage Balance | ±0.3% | Cooling | Free-air Convection |
| Ripple and Noise (at 20 MHz BW) | 50 mVp-p, max. | Dimensions | SIP7 19.50 x 6.00 x 9.50 mm 0.76x0.24x0.37" |
| Short Circuit Protection | Momentary | | DIP14 20.32 x 10.16 x 6.85 mm 0.80 x 0.40 x 0.27" |
| Line Voltage Regulation | ±0.4% | Weight | 2.5 g |
| Load Voltage Regulation | ±0.3% | Case Material | Non-conductive Black Plastic |
| Temperature Coefficient | ±0.02% / °C | | |

Typical Characteristics

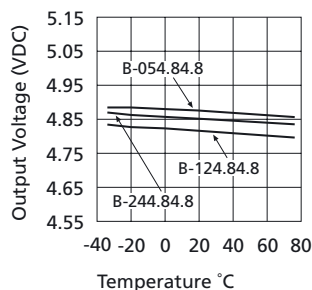
3V Models



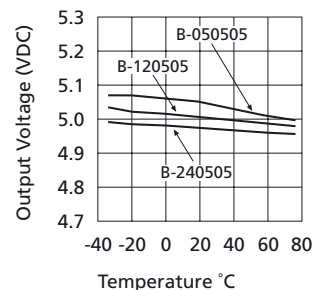
3.3V Models



4.8V Models



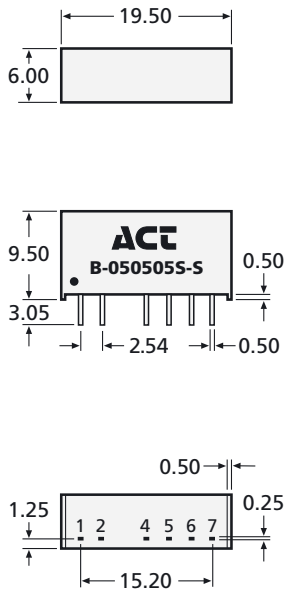
5V Models



B-Series

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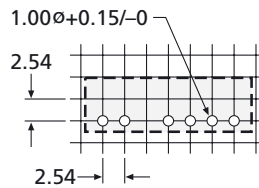
SIP7 Package Style and Pinning (mm)



Pin Connections

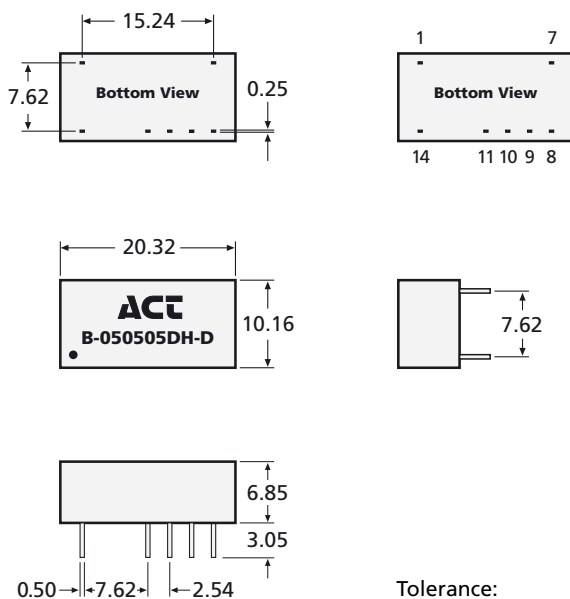
| Pin # | 1kVDC Standard Dual Separate | 3kVDC Dual Separate |
|-------|------------------------------|---------------------|
| 1 | +Vin | +Vin |
| 2 | -Vin | -Vin |
| 4 | +V2out | Omitted |
| 5 | Ground | +V2out |
| 6 | +V1out | Ground |
| 7 | Omitted | +V1out |

Recommended Footprint Details

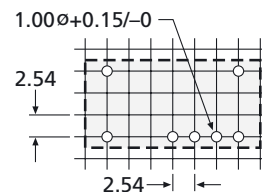


Tolerance:
x.xx = ± 0.25 mm
(± 0.01 "")

DIP14 Package Style and Pinning (mm)



Recommended Footprint Details



Pin Connections

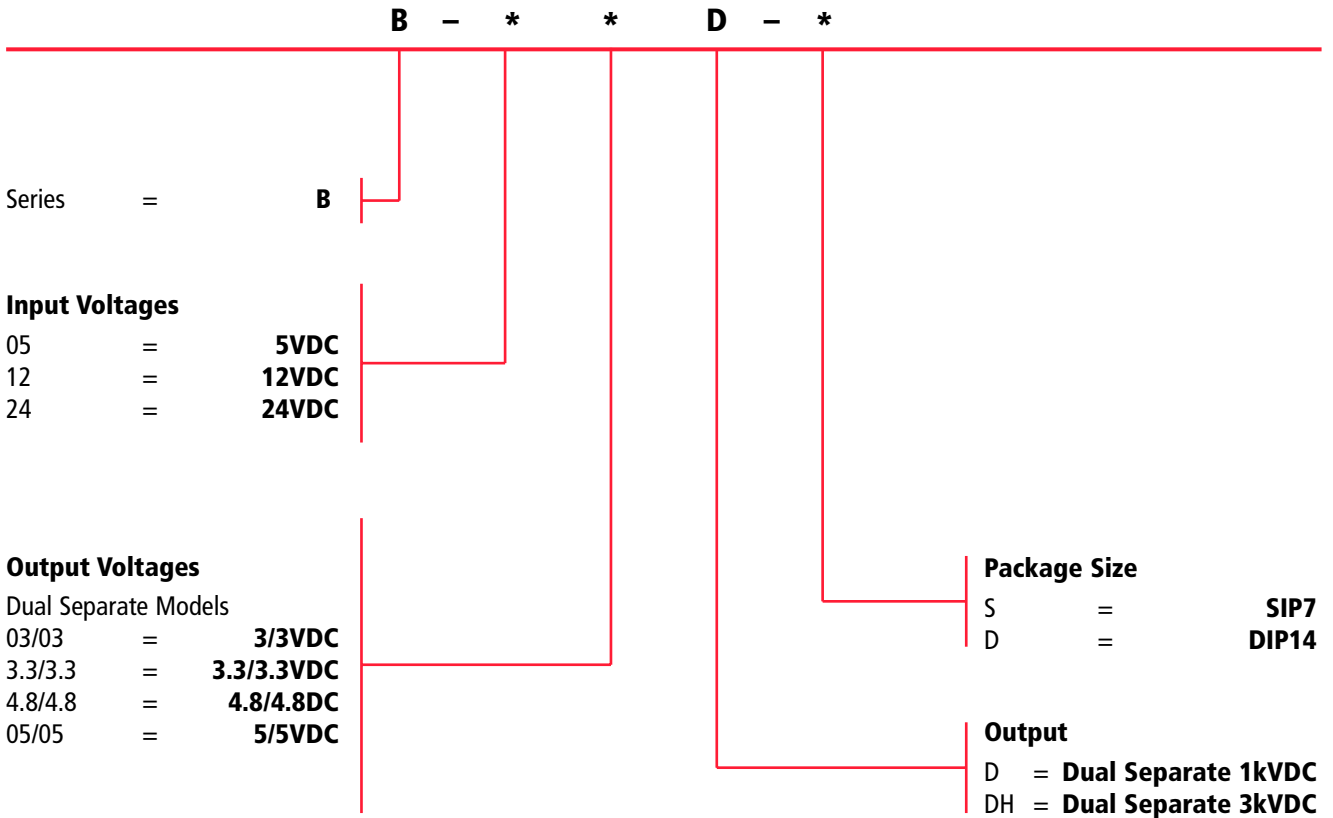
| Pin # | 1kVDC Standard Dual Separate | 3kVDC Dual Separate |
|-------|------------------------------|---------------------|
| 1 | -Vin | -Vin |
| 7 | N.C | N.C |
| 8 | Ground | +V2out |
| 9 | +V2out | Ground |
| 10 | Omitted | +V1out |
| 11 | +V1out | Omitted |
| 14 | +Vin | +Vin |

Tolerance:
x.xx = ± 0.25 mm

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0.6W - 1W Isolated DC/DC-Converters

Model Code Information



Ordering Examples: For availability see Selection Guides on page 7

B-053.33.3S-S = B-Series, 5VDC input, 3.3/3.3 VDC dual separate output, 1kVDC isolation, SIP7 package size