

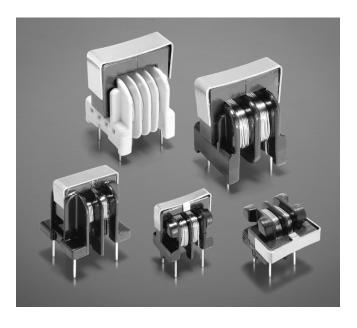








# Common Mode Chokes - BU Series



These low cost, high performance choke coils are designed to virtually eliminate line conducted common mode noise.

The BU9S and BU9HS families are ideal for signal line applications; the others can be used in switching power supplies and power supply circuits. All provide significant attenuation of common mode noise across a broad range of frequencies.

For height-restricted applications, the BU9 and BU9S filters are available in a horizontal configuration, which reduces their height to under half an inch (12.5 mm).

For free evaluation samples, contact Coilcraft or request them on-line at www.coilcraft.com.

Core material Ferrite

**Terminations** RoHS compliant tin-silver over copper. Other terminations available at additional cost.

Weight BU9: 3.1 - 4.1 g

BU9H: 3.1 – 4.1 g BU9H: 3.1 – 4.1 g BU9HS: 3.1 – 3.8 g BU9S: 3.1 – 3.8 g BU10: 6.3 – 6.9 g BU15: 14.6 – 16.1 g BU16: 15.1 – 18.0 g

Ambient temperature -40°C to +125°C

Storage temperature Component: -40°C to +125°C.

Tray packaging: -40°C to +80°C

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging BU9: 100 per tray

BU9H: 100 per tray BU9HS: 100 per tray BU9S: 100 per tray BU10: 100 per tray BU15: 80 per tray BU16: 80 per tray

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787\_PCB\_Washing.pdf.



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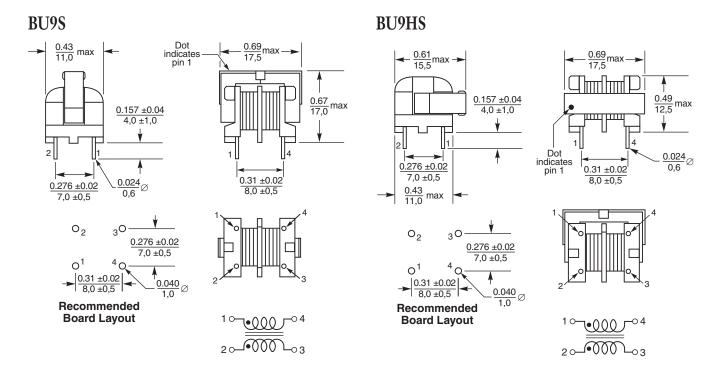
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# Common Mode Chokes - BU9S, BU9HS Series

| Part number    | peakimpedance<br>(kOhms) | Inductance <sup>1</sup><br>min (mH) | DCR <sup>2</sup><br>(Ohms) | Isolation <sup>3</sup><br>(Vrms) | Current<br>max (A) |
|----------------|--------------------------|-------------------------------------|----------------------------|----------------------------------|--------------------|
| BU9S-153R15BL  | 105.7 @ 200 kHz          | 15.0                                | 5.0                        | 1000                             | 0.15               |
| BU9S-7020R3BL  | 59.8 @ 370 kHz           | 7.0                                 | 2.5                        | 1000                             | 0.30               |
| BU9HS-153R15BL | 146.5 @ 220 kHz          | 15.0                                | 5.0                        | 1000                             | 0.15               |
| BU9HS-7020R3BL | 61.9 @ 380 kHz           | 7.0                                 | 2.5                        | 1000                             | 0.30               |

- 1. Inductance tested at 1 kHz, 1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.
- 2. DCR is per winding
- 3. Interwinding isolation (hipot) tested for one minute.
- 4. Electrical specifications at 25°C.



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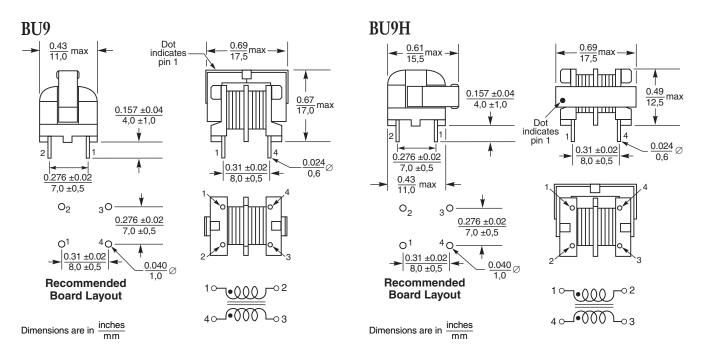
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# Common Mode Chokes - BU9, BU9H Series

| Part number   | Common mode<br>peak impedance<br>(kOhms) | Inductance <sup>1</sup><br>min (mH) | DCR <sup>2</sup><br>(Ohms) | Isolation <sup>3</sup><br>(Vrms) | Current<br>max (A) |
|---------------|--|-------------------------------------|----------------------------|----------------------------------|--------------------|
| BU9-103R25BL  | 123.5 @ 250 kHz                          | 10.0                                | 3.5                        | 1000                             | 0.25               |
| BU9-2820R5BL  | 25.12 @ 660 kHz                          | 2.8                                 | 1.0                        | 1000                             | 0.50               |
| BU9-1320R7BL  | 17.33 @ 910kHz                           | 1.3                                 | 0.5                        | 1000                             | 0.70               |
| BU9-6011R0BL  | 5.43 @ 2100 kHz                          | 0.6                                 | 0.2                        | 1000                             | 1.00               |
| BU9-2011R6BL  | 3.62 @ 4000 kHz                          | 0.2                                 | 0.1                        | 1000                             | 1.60               |
| BU9H-103R25BL | 148.2 @ 230 kHz                          | 10.0                                | 3.5                        | 1000                             | 0.25               |
| BU9H-2820R5BL | 29.76 @ 600 kHz                          | 2.8                                 | 1.0                        | 1000                             | 0.50               |
| BU9H-1320R7BL | 12.31 @ 980 kHz                          | 1.3                                 | 0.5                        | 1000                             | 0.70               |
| BU9H-6011R0BL | 5.47 @ 2000 kHz                          | 0.6                                 | 0.2                        | 1000                             | 1.00               |
| BU9H-2011R6BL | 4.43 @ 2700 kHz                          | 0.2                                 | 0.1                        | 1000                             | 1.60               |

- 1. Inductance tested at 1 kHz, 1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.
- 2. DCR is per winding
- 3. Interwinding isolation (hipot) tested for one minute.
- 4. Electrical specifications at 25°C.





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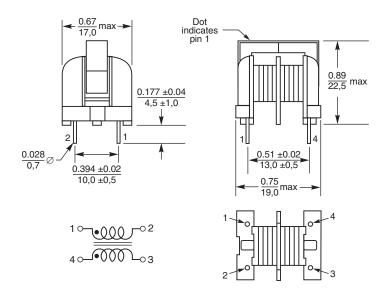
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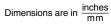


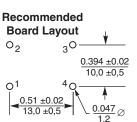
#### **Common Mode Chokes - BU10 Series**

| Part number   | Common mode<br>peak impedance<br>(kOhms) | Inductance <sup>1</sup><br>min (mH) | DCR <sup>2</sup><br>(Ohms) | Isolation <sup>3</sup><br>(Vrms) | Current<br>max (A) |
|---------------|--|-------------------------------------|----------------------------|----------------------------------|--------------------|
| BU10-1811R2BL | 5.27 @ 1200 KHz                          | 0.18                                | 0.20                       | 1000                             | 1.20               |
| BU10-1311R6BL | 3.60 @ 1200 KHz                          | 0.13                                | 0.12                       | 1000                             | 1.60               |
| BU10-1012R2BL | 1.88 @ 1500 KHz                          | 0.10                                | 0.08                       | 1000                             | 2.20               |
| BU10-6003R0BL | 1.15 @ 2100 KHz                          | 0.06                                | 0.04                       | 1000                             | 3.00               |

- $1. \ Inductance \ tested \ at \ 1 \ kHz, 1 \ Vrms, 0 \ Adc \ on \ an \ Agilent/HP \ 4284 A \ LCR-meter \ or \ equivalent.$
- 2. DCR is per winding
- 3. Interwinding isolation (hipot) tested for one minute.
- 4. Electrical specifications at 25°C.







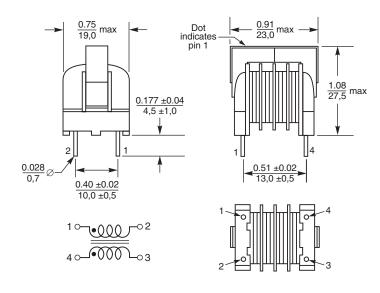


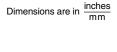


## **Common Mode Chokes - BU15 Series**

| Part number   | Common mode<br>peak impedance<br>(kOhms) | Inductance <sup>1</sup><br>min (mH) | DCR <sup>2</sup><br>(Ohms) | Isolation <sup>3</sup><br>(Vrms) | Current<br>max (A) |
|---------------|--|-------------------------------------|----------------------------|----------------------------------|--------------------|
| BU15-4530R4BL | 398.7 @ 130 kHz                          | 45.0                                | 3.0                        | 1000                             | 0.40               |
| BU15-1430R7BL | 70.58 @ 240 kHz                          | 14.0                                | 1.0                        | 1000                             | 0.70               |
| BU15-7521R0BL | 43.05 @ 340 kHz                          | 7.5                                 | 0.6                        | 1000                             | 1.00               |
| BU15-4421R3BL | 41.14 @ 510 kHz                          | 4.4                                 | 0.3                        | 1000                             | 1.30               |
| BU15-2721R6BL | 32.22 @ 620 kHz                          | 2.7                                 | 0.2                        | 1000                             | 1.60               |

- 1. Inductance tested at 1 kHz, 1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.
- 2. DCR is per winding
- 3. Interwinding isolation (hipot) tested for one minute.
- 4. Electrical specifications at 25°C.





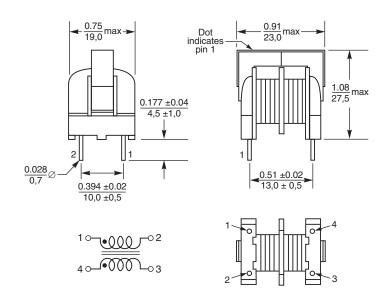


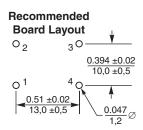


## **Common Mode Chokes - BU16 Series**

| Part number   | Common mode<br>peak impedance<br>(kOhms) | Inductance <sup>1</sup><br>min (mH) | DCR <sup>2</sup><br>(Ohms) | Isolation <sup>3</sup><br>(Vrms) | Current<br>max (A) |
|---------------|--|-------------------------------------|----------------------------|----------------------------------|--------------------|
| BU16-4530R5BL | 269.6 @ 130 kHz                          | 45.0                                | 2.3                        | 1000                             | 0.50               |
| BU16-2530R7BL | 208.3 @ 190 kHz                          | 25.0                                | 1.3                        | 1000                             | 0.70               |
| BU16-1031R0BL | 57.14 @ 310 kHz                          | 10.0                                | 0.5                        | 1000                             | 1.00               |
| BU16-4021R5BL | 26.26 @ 470 kHz                          | 4.0                                 | 0.3                        | 1000                             | 1.50               |
| BU16-2022R0BL | 14.47 @ 720 kHz                          | 2.0                                 | 0.2                        | 1000                             | 2.00               |

- 1. Inductance tested at 1 kHz, 1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.
- 2. DCR is per winding
- 3. Interwinding isolation (hipot) tested for one minute.
- 4. Electrical specifications at 25°C.







Dimensions are in inches

