

**MINIATURE  
AXIAL SHIELDED  
RF INDUCTOR  
SERIES B2**

### FEATURES

- Exceptional Q characteristics
- Excellent inductance to size ratio
- Well suited for high density applications where minimum coupling and high inductance are mandatory

### ELECTRICAL CHARACTERISTICS

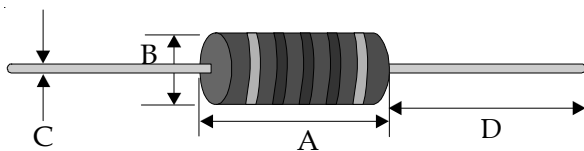
- Inductance range 0.10 $\mu$ H to 1000 $\mu$ H
- Tolerance  $\pm 10\%$  over entire range
- Shielding 5% coupling maximum with 2 units side by side within 1mm
- Rated current Based on Lo changes within  $\pm 10\%$  typical
- Test procedures L & Q are measured with Q Meter HP-4342A at specified frequency

### PHYSICAL CHARACTERISTICS

- Dielectric strength 500 volts RMS
- Operating temp. -55°C to +125°C
- Terminal strength 5 lbs pull test per MIL-STD-202E
- Construction Epoxy end fill, ferrite shielded
- Marking 5 band color code per MIL-C-15305
- Packaging Bulk: 1000 pieces per bag  
Reel: 5000 pieces per reel

### DIMENSIONS IN INCHES

- Body length A 0.335" maximum
- Body diameter B 0.132" maximum
- Lead wire C 24 AWG/TCW
- Lead length D 1.15" nominal



### SPECIFICATIONS

| Part Number | L ( $\mu$ H) | Tol % $\pm$ | Q Min | Test Freq (MHz) | SRF Min (MHz) | DCR Max ( $\Omega$ ) | Rated (I) Max (mA) |
|-------------|--------------|-------------|-------|-----------------|---------------|----------------------|--------------------|
| B2-R10K     | 0.10         | 10          | 42    | 25              | 500           | 0.112                | 1720               |
| B2-R12K     | 0.12         | 10          | 42    | 25              | 500           | 0.126                | 1630               |
| B2-R15K     | 0.15         | 10          | 42    | 25              | 500           | 0.136                | 1550               |
| B2-R18K     | 0.18         | 10          | 42    | 25              | 336           | 0.165                | 1420               |
| B2-R22K     | 0.22         | 10          | 42    | 25              | 331           | 0.198                | 1330               |
| B2-R27K     | 0.27         | 10          | 42    | 25              | 298           | 0.220                | 1230               |
| B2-R33K     | 0.33         | 10          | 42    | 25              | 288           | 0.258                | 1140               |
| B2-R39K     | 0.39         | 10          | 42    | 25              | 271           | 0.292                | 1060               |
| B2-R47K     | 0.47         | 10          | 41    | 25              | 247           | 0.360                | 960                |
| B2-R56K     | 0.56         | 10          | 39    | 25              | 236           | 0.397                | 915                |
| B2-R68K     | 0.68         | 10          | 36    | 25              | 216           | 0.472                | 840                |
| B2-R82K     | 0.82         | 10          | 35    | 25              | 200           | 0.638                | 720                |
| B2-1R0K     | 1.00         | 10          | 42    | 25              | 136           | 0.208                | 1260               |
| B2-1R2K     | 1.2          | 10          | 38    | 7.9             | 120.0         | 0.225                | 1210               |
| B2-1R5K     | 1.5          | 10          | 38    | 7.9             | 111.0         | 0.265                | 1120               |
| B2-1R8K     | 1.8          | 10          | 38    | 7.9             | 103.0         | 0.285                | 1080               |
| B2-2R2K     | 2.2          | 10          | 38    | 7.9             | 94.0          | 0.330                | 1000               |
| B2-2R7K     | 2.7          | 10          | 38    | 7.9             | 84.8          | 0.381                | 935                |
| B2-3R3K     | 3.3          | 10          | 38    | 7.9             | 78.4          | 0.432                | 875                |
| B2-3R9K     | 3.9          | 10          | 40    | 7.9             | 72.8          | 0.576                | 755                |
| B2-4R7K     | 4.7          | 10          | 42    | 7.9             | 66.4          | 0.787                | 650                |
| B2-5R6K     | 5.6          | 10          | 42    | 7.9             | 61.6          | 1.04                 | 565                |
| B2-6R8K     | 6.8          | 10          | 45    | 7.9             | 54.6          | 1.40                 | 485                |
| B2-8R2K     | 8.2          | 10          | 47    | 7.9             | 49.6          | 1.68                 | 440                |
| B2-100K     | 10.0         | 10          | 51    | 7.9             | 44.0          | 2.58                 | 355                |
| B2-120K     | 12           | 10          | 51    | 2.5             | 39.2          | 3.65                 | 300                |
| B2-150K     | 15           | 10          | 45    | 2.5             | 44.0          | 0.86                 | 620                |
| B2-180K     | 18           | 10          | 43    | 2.5             | 40.0          | 1.02                 | 570                |
| B2-220K     | 22           | 10          | 42    | 2.5             | 36.0          | 1.12                 | 545                |
| B2-270K     | 27           | 10          | 37    | 2.5             | 32.8          | 1.28                 | 510                |
| B2-330K     | 33           | 10          | 46    | 2.5             | 29.6          | 1.70                 | 440                |
| B2-390K     | 39           | 10          | 38    | 2.5             | 26.4          | 1.99                 | 405                |
| B2-470K     | 47           | 10          | 42    | 2.5             | 23.2          | 2.41                 | 370                |
| B2-560K     | 56           | 10          | 41    | 2.5             | 21.6          | 2.85                 | 340                |
| B2-680K     | 68           | 10          | 46    | 2.5             | 18.4          | 3.21                 | 320                |
| B2-820K     | 82           | 10          | 46    | 2.5             | 16.8          | 3.57                 | 305                |
| B2-101K     | 100          | 10          | 43    | 2.5             | 15.2          | 4.10                 | 280                |
| B2-121K     | 120          | 10          | 50    | 0.79            | 14.4          | 5.97                 | 235                |
| B2-151K     | 150          | 10          | 49    | 0.79            | 12.0          | 7.05                 | 215                |
| B2-181K     | 180          | 10          | 56    | 0.79            | 11.2          | 8.12                 | 200                |
| B2-221K     | 220          | 10          | 53    | 0.79            | 9.6           | 14.8                 | 150                |
| B2-271K     | 270          | 10          | 57    | 0.79            | 9.2           | 16.8                 | 140                |
| B2-331K     | 330          | 10          | 57    | 0.79            | 8.4           | 18.6                 | 130                |
| B2-391K     | 390          | 10          | 57    | 0.79            | 8.0           | 21.1                 | 120                |
| B2-471K     | 470          | 10          | 50    | 0.79            | 6.8           | 32.2                 | 100                |
| B2-561K     | 560          | 10          | 50    | 0.79            | 6.0           | 36.4                 | 95                 |
| B2-681K     | 680          | 10          | 56    | 0.79            | 5.6           | 41.1                 | 90                 |
| B2-821K     | 820          | 10          | 49    | 0.79            | 5.2           | 45.0                 | 85                 |
| B2-102K     | 1000         | 10          | 49    | 0.79            | 4.8           | 52.0                 | 80                 |