

**AXIAL SHIELDED  
RF INDUCTOR  
B3 SERIES**

**FEATURES**

- Same size and electrical parameter as MS-75087, MS-75088, MS-75089, MS-90537
- Meets all requirements of MIL-C-15305
- Sturdy construction & precision performance

**ELECTRICAL CHARACTERISTICS**

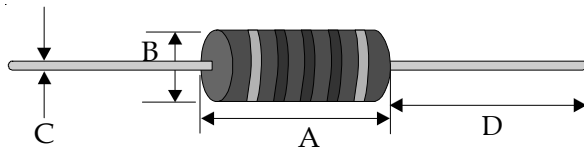
- Inductance range      0.10 $\mu$ H to 1000 $\mu$ H
- Tolerance                 $\pm 10\%$  over entire range
- Shielding                5% coupling maximum
- Rated current            Based on Lo changes within  $\pm 10\%$  typical
- Test procedures        L & Q are measured with Q Meter HP-4342A at 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
- Resistance to solvents Conforms to MIL-STD-202E
- Construction            Molded, Ferrite sleeve shielding
- Marking                  5 Band color code per MIL-C-15305
- Packaging                Bulk: 500 pieces per bag  
Reel: 2500 pieces per reel

**DIMENSIONS IN INCHES**

- Body length A          0.410"  $\pm$  0.02"
- Body diameter B        0.162"  $\pm$  0.01"
- Lead wire C            22 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) |
|-------------|--------------|-------------|-------|-----------------|---------------|----------------------|--------------------|
| B3-R10K     | 0.10         | 10          | 50    | 25              | 250           | 0.025                | 1790               |
| B3-R12K     | 0.12         | 10          | 51    | 25              | 250           | 0.034                | 1530               |
| B3-R15K     | 0.15         | 10          | 51    | 25              | 250           | 0.037                | 1470               |
| B3-R18K     | 0.18         | 10          | 50    | 25              | 250           | 0.047                | 1300               |
| B3-R22K     | 0.22         | 10          | 49    | 25              | 250           | 0.067                | 1100               |
| B3-R27K     | 0.27         | 10          | 47    | 25              | 250           | 0.110                | 855                |
| B3-R33K     | 0.33         | 10          | 46    | 25              | 250           | 0.130                | 780                |
| B3-R39K     | 0.39         | 10          | 44    | 25              | 250           | 0.180                | 670                |
| B3-R47K     | 0.47         | 10          | 44    | 25              | 235           | 0.250                | 565                |
| B3-R56K     | 0.56         | 10          | 43    | 25              | 210           | 0.330                | 490                |
| B3-R68K     | 0.68         | 10          | 42    | 25              | 190           | 0.450                | 420                |
| B3-R82K     | 0.82         | 10          | 40    | 25              | 180           | 0.590                | 370                |
| B3-1R0K     | 1.00         | 10          | 40    | 25              | 140           | 0.070                | 1070               |
| B3-1R2K     | 1.2          | 10          | 44    | 7.9             | 130           | 0.10                 | 895                |
| B3-1R5K     | 1.5          | 10          | 44    | 7.9             | 115           | 0.12                 | 815                |
| B3-1R8K     | 1.8          | 10          | 44    | 7.9             | 105           | 0.14                 | 775                |
| B3-2R2K     | 2.2          | 10          | 44    | 7.9             | 100           | 0.19                 | 650                |
| B3-2R7K     | 2.7          | 10          | 44    | 7.9             | 92            | 0.28                 | 535                |
| B3-3R3K     | 3.3          | 10          | 44    | 7.9             | 85            | 0.35                 | 480                |
| B3-3R9K     | 3.9          | 10          | 44    | 7.9             | 75            | 0.40                 | 450                |
| B3-4R7K     | 4.7          | 10          | 44    | 7.9             | 70            | 0.55                 | 380                |
| B3-5R6K     | 5.6          | 10          | 44    | 7.9             | 65            | 0.72                 | 335                |
| B3-6R8K     | 6.8          | 10          | 50    | 7.9             | 55            | 1.02                 | 280                |
| B3-8R2K     | 8.2          | 10          | 50    | 7.9             | 50            | 1.32                 | 250                |
| B3-100K     | 10.0         | 10          | 50    | 7.9             | 46            | 1.62                 | 220                |
| B3-120K     | 12           | 10          | 55    | 2.5             | 44            | 2.00                 | 200                |
| B3-150K     | 15           | 10          | 45    | 2.5             | 49            | 0.80                 | 315                |
| B3-180K     | 18           | 10          | 45    | 2.5             | 45            | 0.89                 | 300                |
| B3-220K     | 22           | 10          | 45    | 2.5             | 41            | 0.96                 | 290                |
| B3-270K     | 27           | 10          | 45    | 2.5             | 38            | 1.19                 | 260                |
| B3-330K     | 33           | 10          | 45    | 2.5             | 34            | 1.37                 | 240                |
| B3-390K     | 39           | 10          | 50    | 2.5             | 29            | 1.93                 | 205                |
| B3-470K     | 47           | 10          | 50    | 2.5             | 27            | 2.11                 | 195                |
| B3-560K     | 56           | 10          | 40    | 2.5             | 25            | 2.23                 | 190                |
| B3-680K     | 68           | 10          | 50    | 2.5             | 21            | 2.70                 | 170                |
| B3-820K     | 82           | 10          | 50    | 2.5             | 10.5          | 2.44                 | 180                |
| B3-101K     | 100          | 10          | 50    | 2.5             | 10.0          | 3.12                 | 160                |
| B3-121K     | 120          | 10          | 55    | 0.79            | 9.7           | 3.60                 | 150                |
| B3-151K     | 150          | 10          | 55    | 0.79            | 8.5           | 4.10                 | 140                |
| B3-181K     | 180          | 10          | 55    | 0.79            | 8.0           | 4.40                 | 135                |
| B3-221K     | 220          | 10          | 55    | 0.79            | 7.5           | 5.00                 | 125                |
| B3-271K     | 270          | 10          | 55    | 0.79            | 7.0           | 5.80                 | 115                |
| B3-331K     | 330          | 10          | 55    | 0.79            | 6.5           | 6.40                 | 110                |
| B3-391K     | 390          | 10          | 60    | 0.79            | 6.2           | 7.40                 | 105                |
| B3-471K     | 470          | 10          | 60    | 0.79            | 5.7           | 9.50                 | 92                 |
| B3-561K     | 560          | 10          | 60    | 0.79            | 4.7           | 10.5                 | 90                 |
| B3-681K     | 680          | 10          | 60    | 0.79            | 4.5           | 11.8                 | 80                 |
| B3-821K     | 820          | 10          | 57    | 0.79            | 4.2           | 13.0                 | 80                 |
| B3-102K     | 1000         | 10          | 65    | 0.79            | 3.8           | 17.5                 | 70                 |