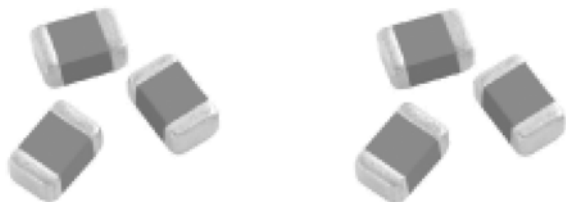


## Multilayer Ferrite Beads



### MECHANICAL SPECIFICATIONS

**Solderability:** 90 % coverage after 5 s dip in 235 °C solder following 60 s preheat at 120 °C to 150 °C and type R flux dip

**Resistance to Solder Heat:** 10 s in 260 °C solder, after preheat and flux per above

**Terminal Strength:** 0.2 kg (0.44 lbs) minimum for 30 s

**Beam Strength:** 0.2 kg (0.44 lbs) minimum

**Flex:** 0.2 mm minimum mounted on a 1.6 mm thick PC board

### STANDARD ELECTRICAL SPECIFICATIONS

| Z<br>± 25 % AT 100 MHz<br>(Ω) | DCR MAX.<br>(Ω) | RATED<br>DC CURRENT<br>(mA) |
|-------------------------------|-----------------|-----------------------------|
| 20                            | 0.13            | 300                         |
| 30                            | 0.20            | 300                         |
| 40                            | 0.20            | 300                         |
| 60                            | 0.30            | 300                         |
| 70                            | 0.30            | 300                         |
| 120                           | 0.45            | 300                         |
| 240                           | 0.70            | 200                         |
| 300                           | 0.80            | 200                         |
| 600                           | 1.00            | 200                         |

### FEATURES

- High reliability
- Surface mountable
- Magnetically self shielded
- Nickel barrier plating virtually eliminates silver migration
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



**RoHS**  
COMPLIANT  
HALOGEN  
**FREE**

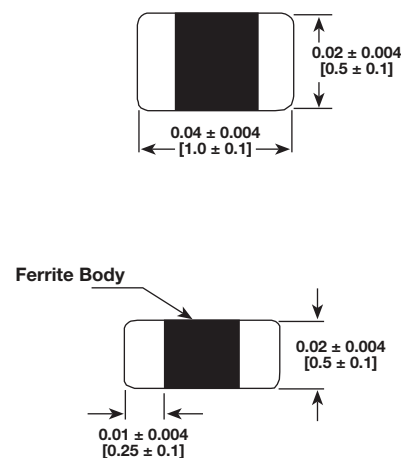
### ENVIRONMENTAL SPECIFICATIONS

**Operating Temperature:** - 55 °C to + 125 °C

**Thermal Shock:** 100 cycles, - 40 °C to + 125 °C

**Biased Humidity:** 85 % RH at 85 °C, 1000 h at full rated current

### DIMENSIONS in inches [millimeters]



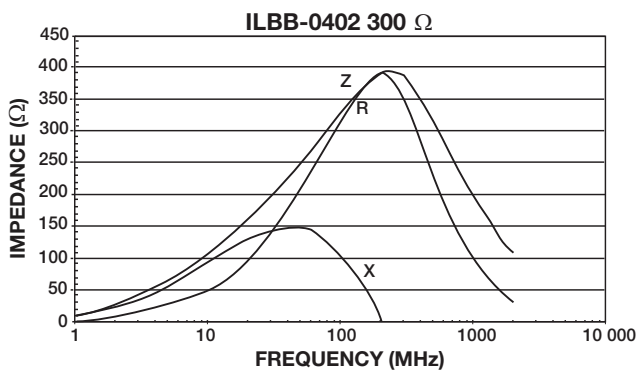
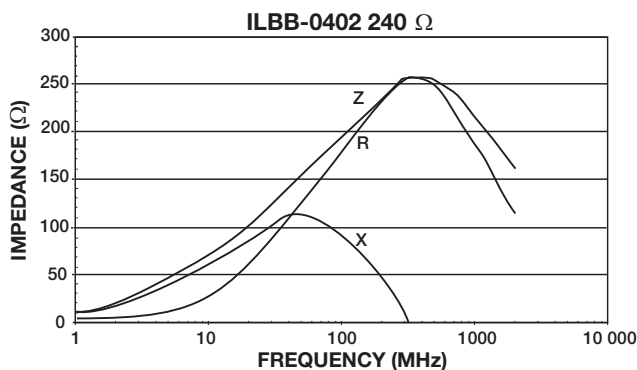
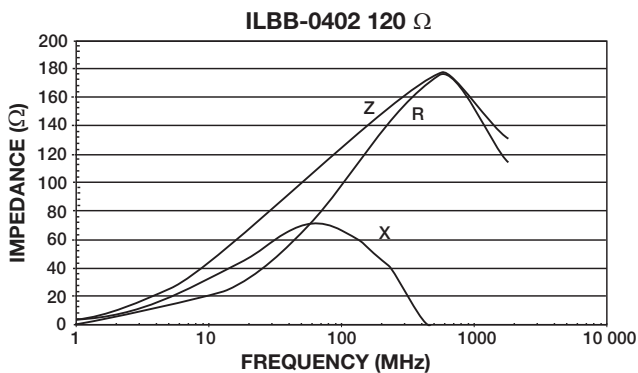
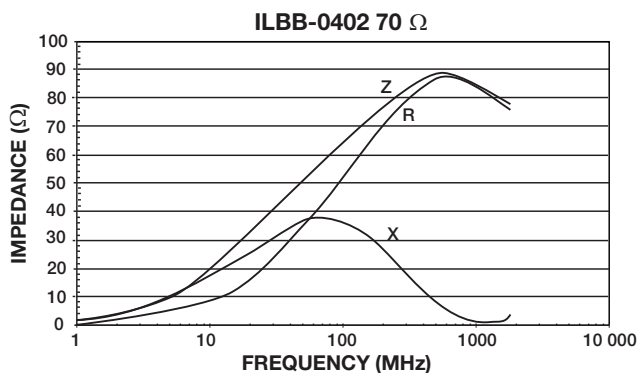
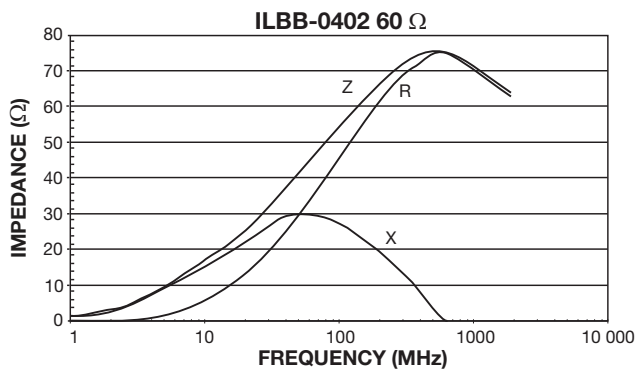
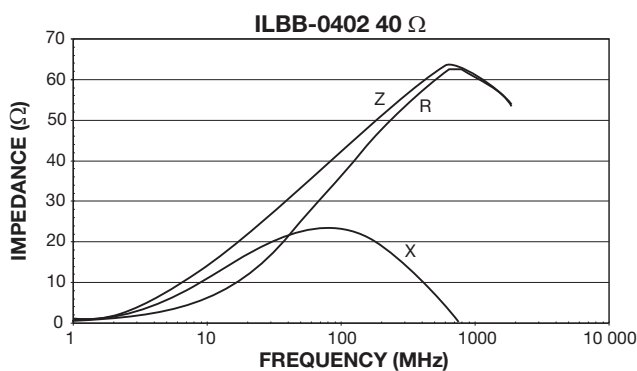
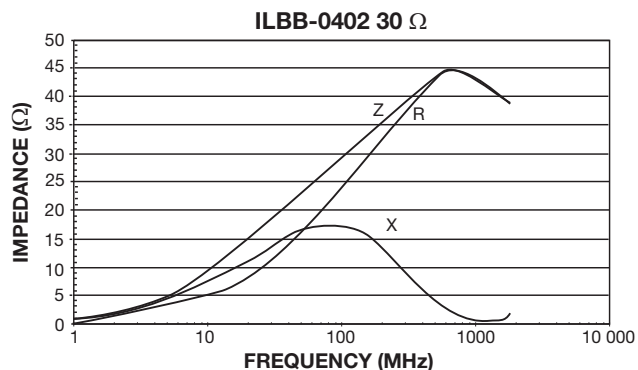
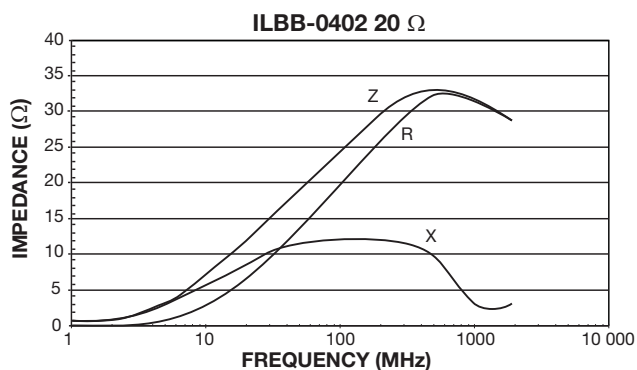
### DESCRIPTION

|                  |                 |                     |              |                               |
|------------------|-----------------|---------------------|--------------|-------------------------------|
| <b>ILBB-0402</b> | <b>120</b>      | <b>± 25 %</b>       | <b>ER</b>    | <b>e3</b>                     |
| MODEL            | IMPEDANCE VALUE | IMPEDANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

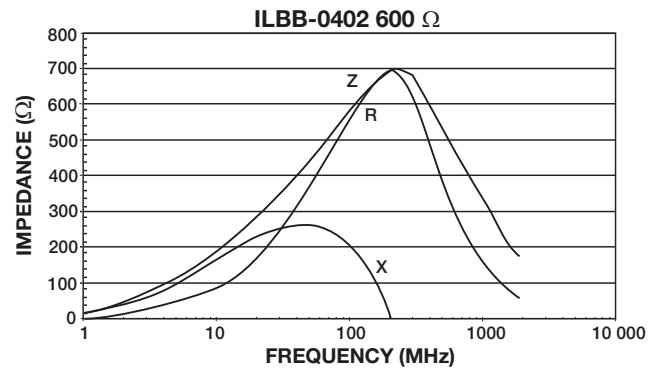
### GLOBAL PART NUMBER

|                |          |          |          |          |          |          |          |              |          |                 |          |          |                     |
|----------------|----------|----------|----------|----------|----------|----------|----------|--------------|----------|-----------------|----------|----------|---------------------|
| <b>I</b>       | <b>L</b> | <b>B</b> | <b>B</b> | <b>0</b> | <b>4</b> | <b>0</b> | <b>2</b> | <b>E</b>     | <b>R</b> | <b>1</b>        | <b>2</b> | <b>1</b> | <b>V</b>            |
| PRODUCT FAMILY |          |          |          | SIZE     |          |          |          | PACKAGE CODE |          | IMPEDANCE VALUE |          |          | IMPEDANCE TOLERANCE |

## TYPICAL CURVES - Frequency Characteristics of R, X, and Z



**TYPICAL CURVES** - Frequency Characteristics of R, X, and Z





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