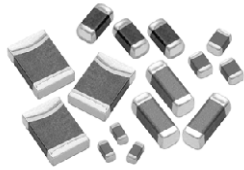


## High Current Multilayer Ferrite Beads



### MECHANICAL SPECIFICATIONS

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

**Resistance To Solder Heat:** 10 seconds in 260 °C solder after preheat and flux per above

**Terminal Strength:** (0603) 0.3 kg, (0805) 0.6 kg, (1206) 1.0 kg, (1806) 1.0 kg, (1812) 1.5 kg for 30 seconds

### FEATURES

- High reliability
- Surface mountable
- Current rating up to 6 amps
- Magnetically self shielded
- Nickel barrier plating virtually eliminates silver migration
- 100 % lead (Pb)-free and RoHS compliant



**RoHS**  
COMPLIANT

**Beam Strength:** (0603) 0.3 kg, (0805) 1.0 kg, (1206) 2.0 kg, (1806) 2.5 kg, (1812) 2.5 kg

### ENVIRONMENTAL SPECIFICATIONS

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

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

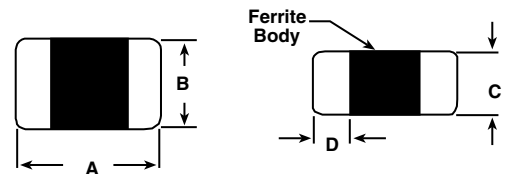
**Biased Humidity:** 85 % RH at 85 °C, 1000 hours at full rated current

### STANDARD ELECTRICAL SPECIFICATIONS

| PART NUMBER | IMPEDANCE (± 25 %) | IMPEDANCE FREQUENCY (MHz) | DCR MAX. (Ohms) | RATED DC CURRENT (mA) |
|-------------|--------------------|---------------------------|-----------------|-----------------------|
| ILHB-0603   | 60                 | 100                       | 0.10            | 2000                  |
| ILHB-0603   | 120                | 100                       | 0.10            | 2000                  |
| ILHB-0805   | 30                 | 100                       | 0.015           | 6000                  |
| ILHB-0805   | 60                 | 100                       | 0.03            | 3000                  |
| ILHB-0805   | 90                 | 100                       | 0.025           | 5000                  |
| ILHB-0805   | 120                | 100                       | 0.03            | 5000                  |
| ILHB-0805   | 250                | 100                       | 0.04            | 3000                  |
| ILHB-0805   | 600                | 100                       | 0.10            | 2000                  |
| ILHB-1206   | 50                 | 100                       | 0.02            | 6000                  |
| ILHB-1206   | 75                 | 100                       | 0.03            | 3000                  |
| ILHB-1206   | 120                | 100                       | 0.02            | 6000                  |
| ILHB-1206   | 500                | 100                       | 0.06            | 2500                  |
| ILHB-1206   | 600                | 100                       | 0.10            | 2500                  |
| ILHB-1806   | 60                 | 100                       | 0.02            | 6000                  |
| ILHB-1812   | 120                | 100                       | 0.02            | 6000                  |
| ILHB-1812   | 600                | 50                        | 0.04            | 3000                  |
| ILHB-1812   | 1300               | 60                        | 0.05            | 3000                  |

### DIMENSIONS in inches [millimeters]

#### Dimensional Outline



| SIZE | A                             | B                             | C                            | D                              |
|------|-------------------------------|-------------------------------|------------------------------|--------------------------------|
| 0603 | 0.06 ± 0.006<br>[1.6 ± 0.15]  | 0.03 ± 0.006<br>[0.8 ± 0.15]  | 0.03 ± 0.006<br>[0.8 ± 0.15] | 0.012 ± 0.008<br>[0.30 ± 0.20] |
| 0805 | 0.079 ± 0.008<br>[2.0 ± 0.2]  | 0.049 ± 0.008<br>[1.25 ± 0.2] | 0.035 ± 0.008<br>[0.9 ± 0.2] | 0.02 ± 0.012<br>[0.50 ± 0.30]  |
| 1206 | 0.126 ± 0.008<br>[3.2 ± 0.2]  | 0.063 ± 0.008<br>[1.6 ± 0.2]  | 0.043 ± 0.008<br>[1.1 ± 0.2] | 0.02 ± 0.012<br>[0.50 ± 0.30]  |
| 1806 | 0.177 ± 0.010<br>[4.5 ± 0.25] | 0.063 ± 0.008<br>[1.6 ± 0.2]  | 0.063 ± 0.008<br>[1.6 ± 0.2] | 0.024 ± 0.016<br>[0.60 ± 0.40] |
| 1812 | 0.177 ± 0.010<br>[4.5 ± 0.25] | 0.126 ± 0.010<br>[3.2 ± 0.25] | 0.06 ± 0.01<br>[1.5 ± 0.25]  | 0.024 ± 0.016<br>[0.60 ± 0.40] |

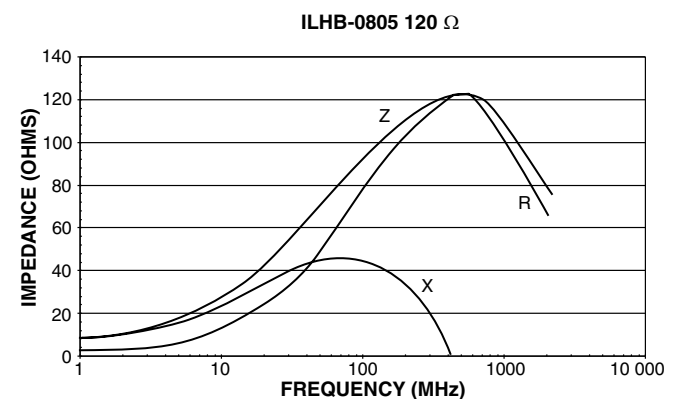
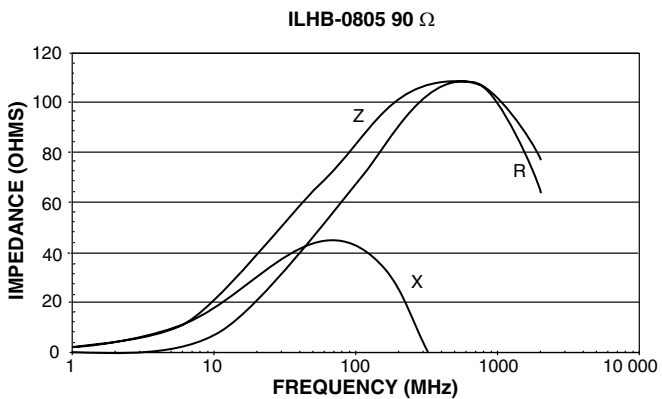
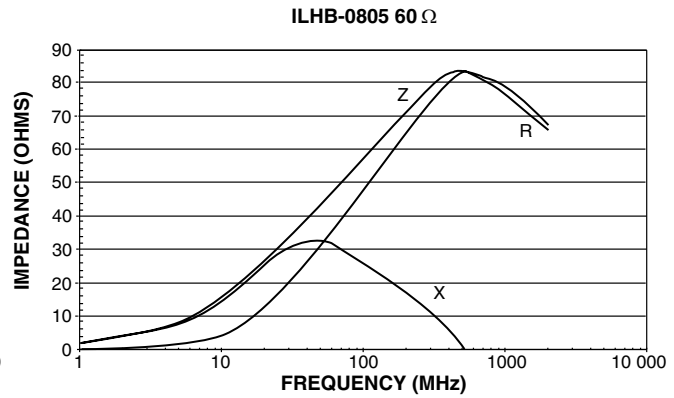
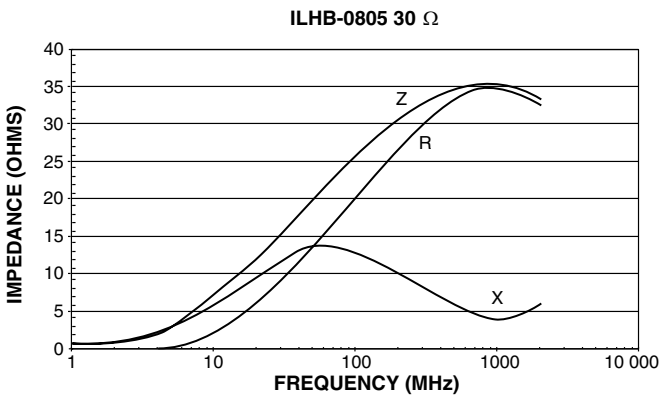
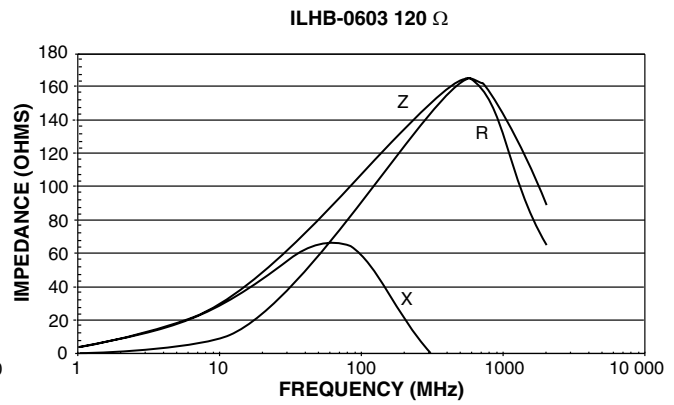
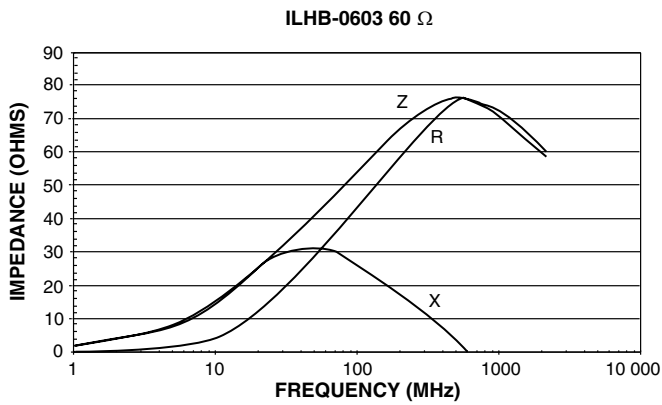
### DESCRIPTION

|       |      |                 |                     |              |                               |
|-------|------|-----------------|---------------------|--------------|-------------------------------|
| ILHB  | 1206 | 120             | ± 25 %              | ER           | e3                            |
| MODEL | SIZE | IMPEDANCE VALUE | IMPEDANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

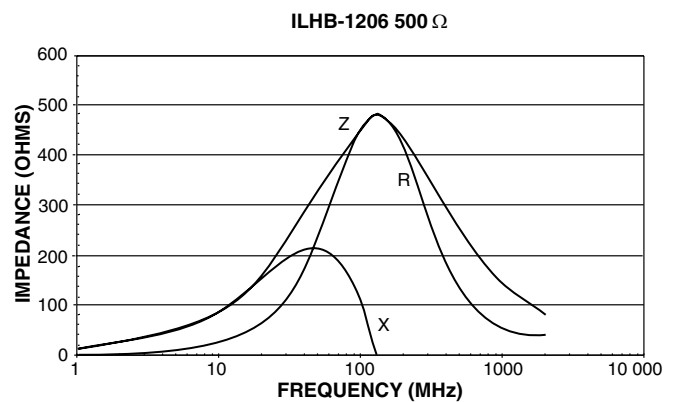
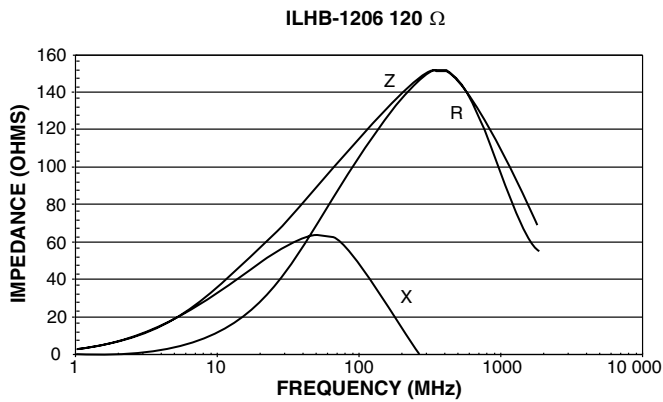
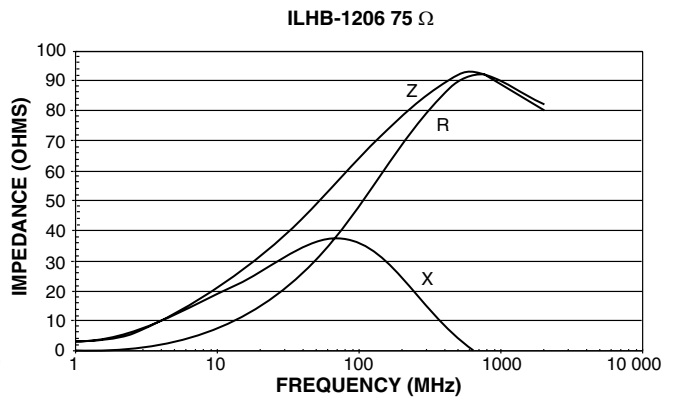
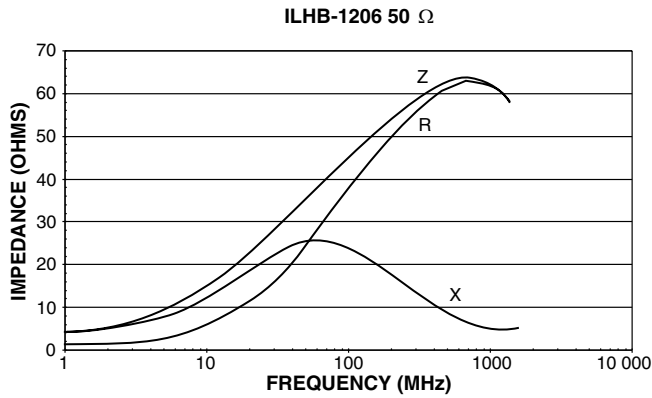
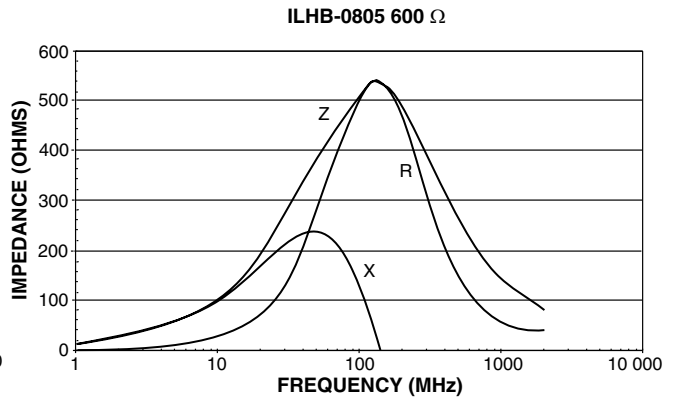
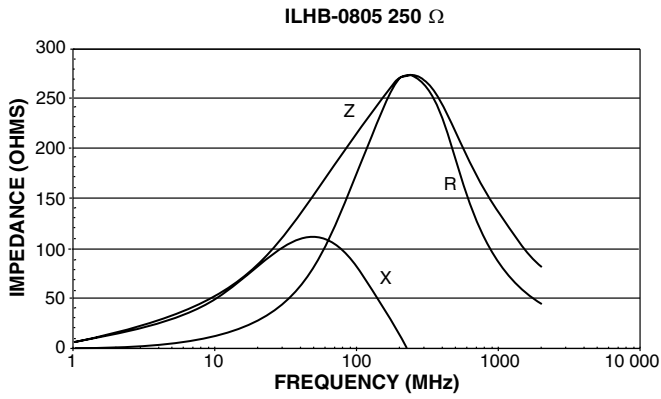
### GLOBAL PART NUMBER

|       |   |   |   |      |   |   |   |              |   |                 |   |   |                     |
|-------|---|---|---|------|---|---|---|--------------|---|-----------------|---|---|---------------------|
| I     | L | H | B | 1    | 2 | 0 | 6 | E            | R | 1               | 2 | 1 | V                   |
| MODEL |   |   |   | SIZE |   |   |   | PACKAGE CODE |   | IMPEDANCE VALUE |   |   | IMPEDANCE TOLERANCE |

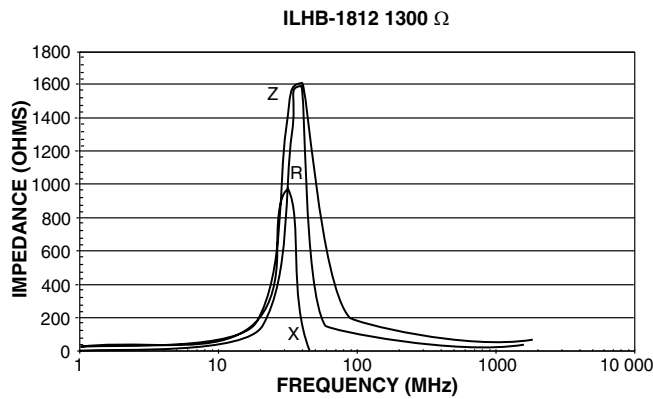
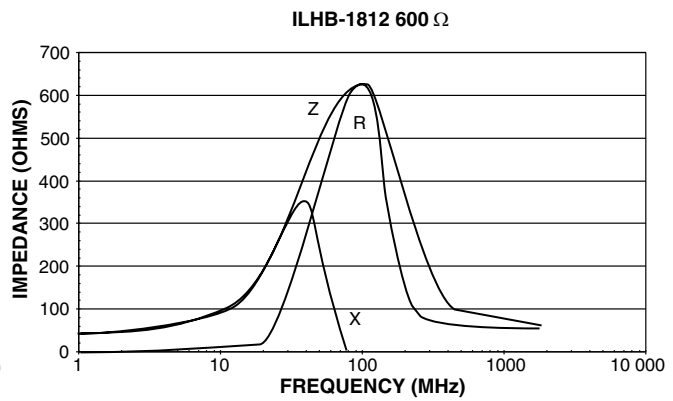
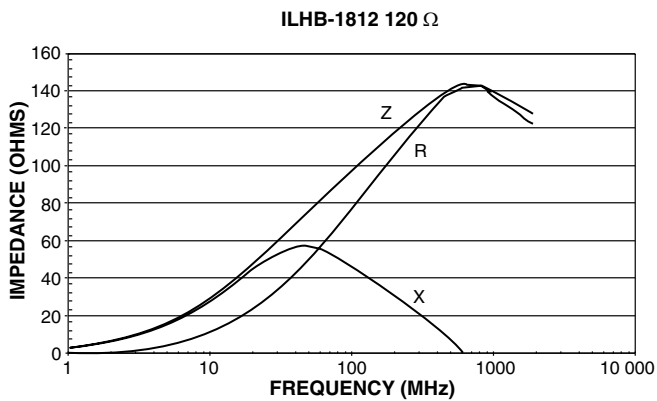
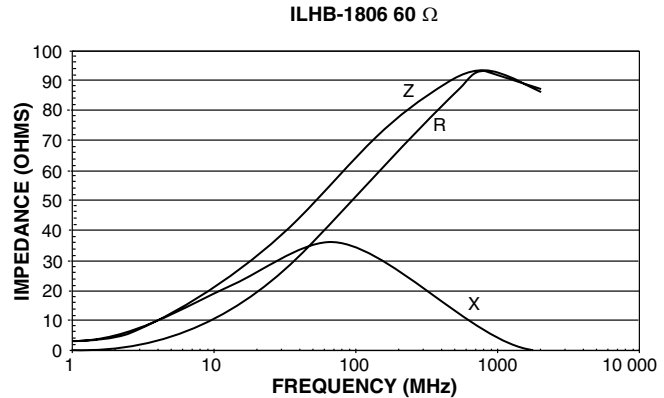
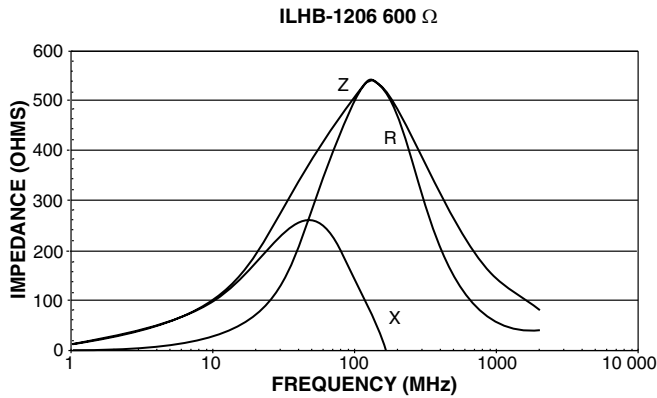
**TYPICAL CURVES - FREQUENCY CHARACTERISTICS OF R, X AND Z**



**TYPICAL CURVES - FREQUENCY CHARACTERISTICS OF R, X AND Z**



**TYPICAL CURVES - FREQUENCY CHARACTERISTICS OF R, X AND Z**





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