

## 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:** 0.6 kg (1.32 lbs) minimum for 30 s

**Beam Strength:** 1 kg (2.2 lbs) minimum

**Flex:** 0.079" [2 mm] min. mounted on 0.063" [1.6 mm] thick PC board

### STANDARD ELECTRICAL SPECIFICATIONS

| Z<br>± 25 % AT 100 MHz<br>(Ω) | DCR<br>MAX.<br>(Ω) | RATED<br>DC CURRENT<br>(mA) |
|-------------------------------|--------------------|-----------------------------|
| 7                             | 0.06               | 600                         |
| 11                            | 0.06               | 600                         |
| 17                            | 0.06               | 600                         |
| 26                            | 0.06               | 600                         |
| 32                            | 0.06               | 600                         |
| 40                            | 0.15               | 300                         |
| 50                            | 0.15               | 300                         |
| 60                            | 0.15               | 300                         |
| 75                            | 0.15               | 300                         |
| 80                            | 0.15               | 300                         |
| 90                            | 0.15               | 300                         |
| 100                           | 0.15               | 300                         |
| 120                           | 0.15               | 300                         |
| 150                           | 0.15               | 300                         |
| 180                           | 0.20               | 200                         |
| 220                           | 0.20               | 200                         |
| 300                           | 0.20               | 200                         |
| 400                           | 0.30               | 200                         |
| 600                           | 0.30               | 200                         |
| 1000                          | 0.35               | 100                         |
| 1500                          | 0.40               | 100                         |
| 2000                          | 0.50               | 80                          |
| 2200                          | 0.60               | 80                          |

### 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

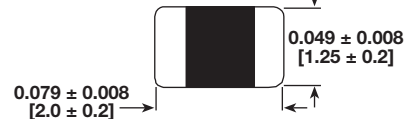
**Operating Temperature:** - 55 °C to + 125 °C

**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]

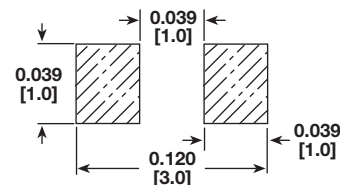
#### Dimensional Outline



#### Ferrite Body



#### Recommended Pad Layout



### PACKAGING OPTIONS

- Tape and Reel: Embossed plastic carrier tape per EIA481-1, 4000 pieces on a 7" [178 mm] reel

### DESCRIPTION

|           |                 |                     |              |                               |
|-----------|-----------------|---------------------|--------------|-------------------------------|
| ILBB-0805 | 11              | ± 25 %              | ER           | e3                            |
| MODEL     | IMPEDANCE VALUE | IMPEDANCE TOLERANCE | PACKAGE CODE | JEDEC LEAD (Pb)-FREE STANDARD |

### GLOBAL PART NUMBER

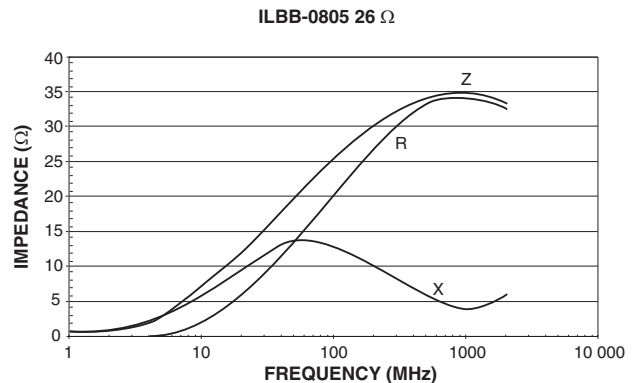
|                |   |   |   |      |   |   |   |              |   |                 |   |   |                     |
|----------------|---|---|---|------|---|---|---|--------------|---|-----------------|---|---|---------------------|
| I              | L | B | B | 0    | 8 | 0 | 5 | E            | R | 1               | 1 | 0 | V                   |
| PRODUCT FAMILY |   |   |   | SIZE |   |   |   | PACKAGE CODE |   | IMPEDANCE VALUE |   |   | IMPEDANCE TOLERANCE |

**TAPE AND REEL SPECIFICATIONS 0805 SIZE PER EIA-481-1 in inches [millimeters]**



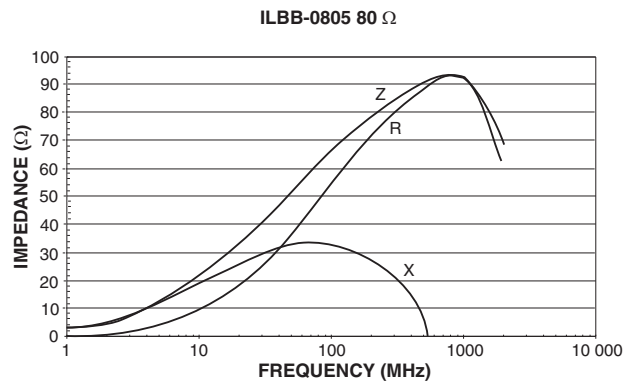
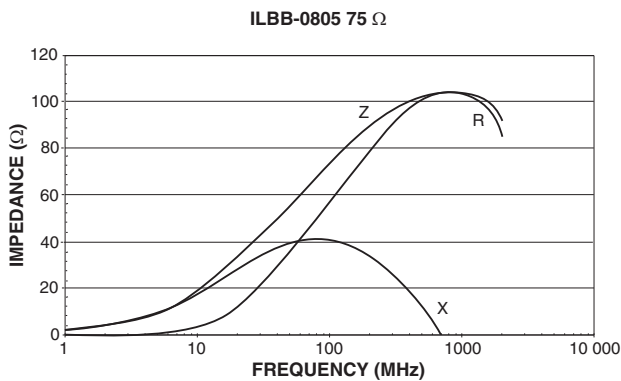
|                |   |
|----------------|---|
| A <sub>0</sub> | 0.059 ± 0.004 [1.50 ± 0.1]                |
| B <sub>0</sub> | 0.093 ± 0.006 [2.35 ± 0.15]               |
| D <sub>0</sub> | 0.059 + 0.004/- 0.000 [1.5 + 0.1/- 0.0]   |
| D <sub>1</sub> | 0.039 min. [1.0 min.]                     |
| E <sub>1</sub> | 0.069 ± 0.004 [1.75 ± 0.1]                |
| F              | 0.138 ± 0.002 [3.50 ± 0.05]               |
| K <sub>0</sub> | 0.049 ± 0.002 [1.24 ± 0.05]               |
| P <sub>0</sub> | 0.157 ± 0.004 [4.00 ± 0.1]                |
| P <sub>1</sub> | 0.157 ± 0.004 [4.00 ± 0.1]                |
| P <sub>2</sub> | 0.079 ± 0.002 [2.00 ± 0.05]               |
| W              | 0.327 max. [8.3 max.]                     |
| T              | 0.008 ± 0.002 [0.2 ± 0.05]                |
| A              | 7.000 ± 0.079 [178 ± 2.0]                 |
| N              | 2.500 [63.5]                              |
| C              | 0.512 ± 0.020/- 0.008 [13.00 ± 0.5/- 0.2] |
| W <sub>1</sub> | 0.315 + 0.059/- 0.000 [8.00 + 1.5]        |
| T <sub>1</sub> | 0.079 ± 0.002 [2.00 ± 0.05]               |

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





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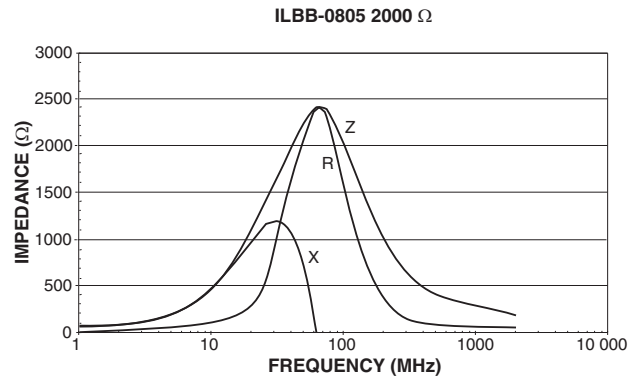


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