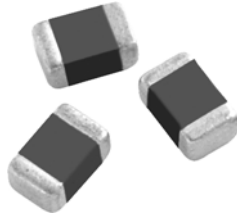




**THE DATASHEET OF  
ILBB0805ER221V**



## 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 ± 25 % AT 100 MHz (Ω)	DCR MAX. (Ω)	RATED DC CURRENT (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

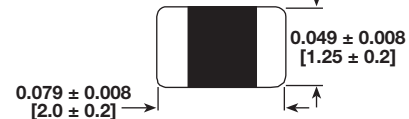
**Operating Temperature:** - 55 °C to + 125 °C

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

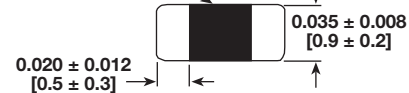
**Biased Humidity:** 85 % RH at 85 °C, 1000 h at full rated current

### DIMENSIONS in inches [millimeters]

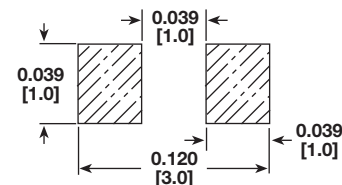
#### Dimensional Outline



#### 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

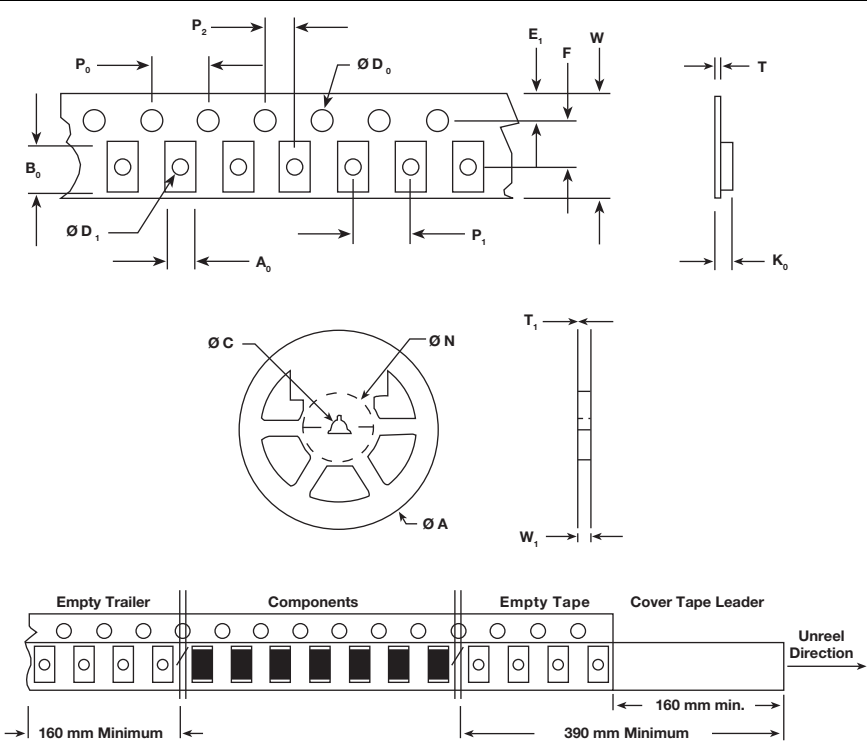
### DESCRIPTION

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

### GLOBAL PART NUMBER

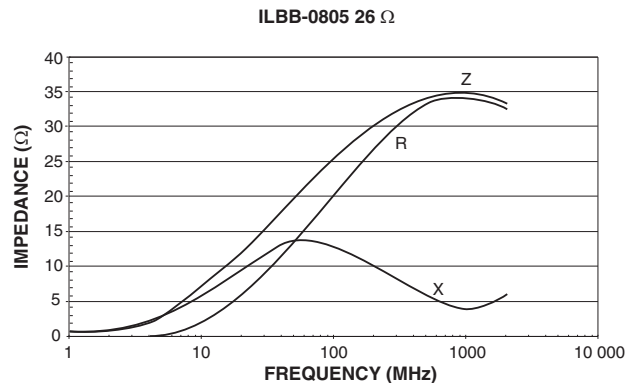
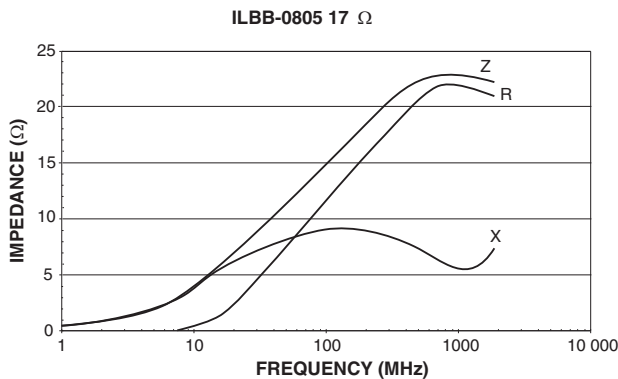
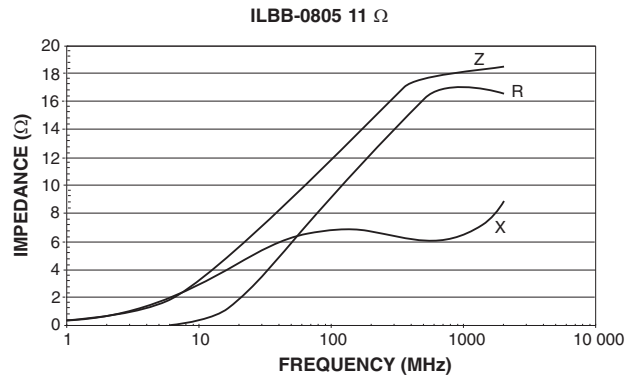
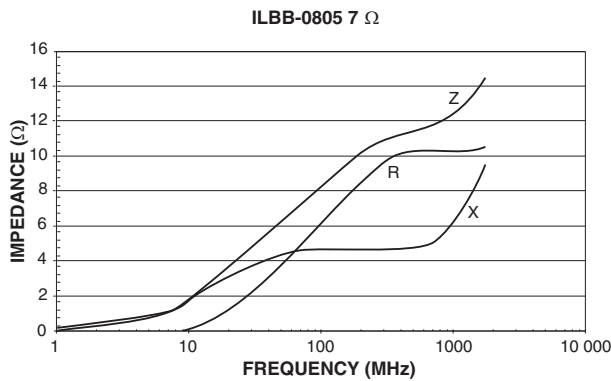
I	L	B	B	0	8	0	5	E	R	1	1	0	V
PRODUCT FAMILY				SIZE				PACKAGE CODE		IMPEDANCE VALUE			IMPEDANCE TOLERANCE

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



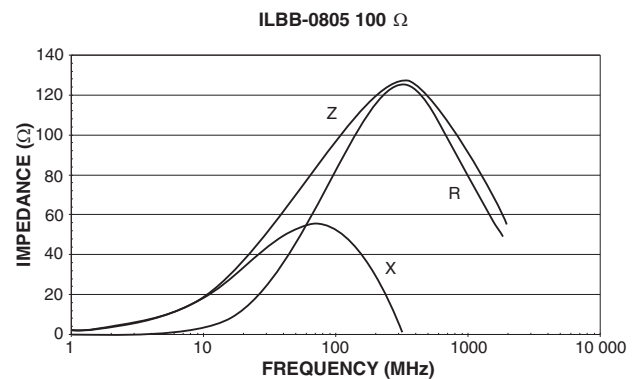
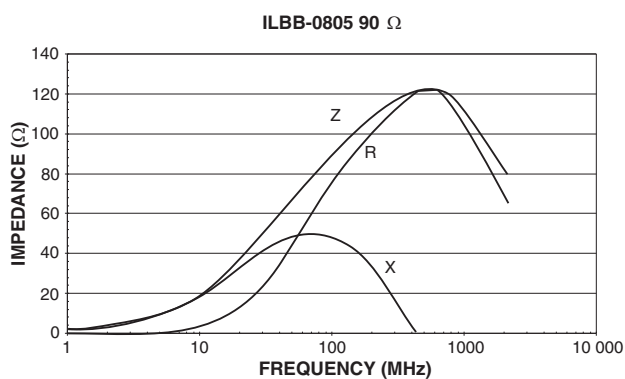
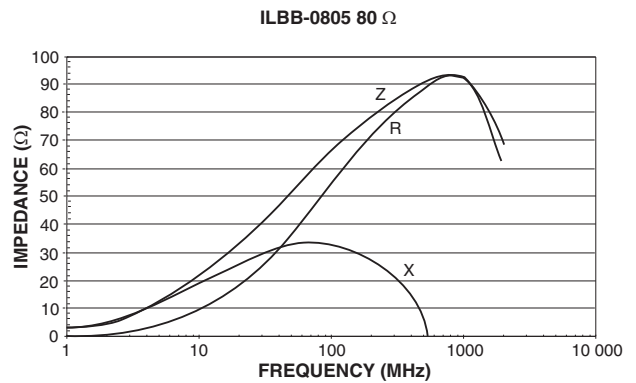
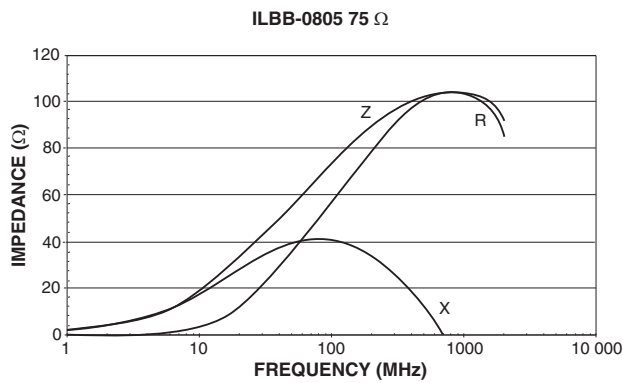
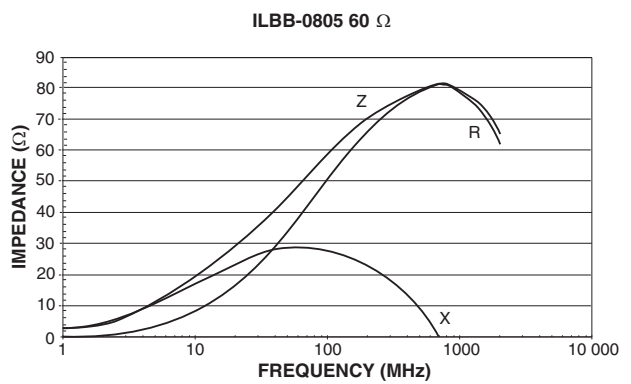
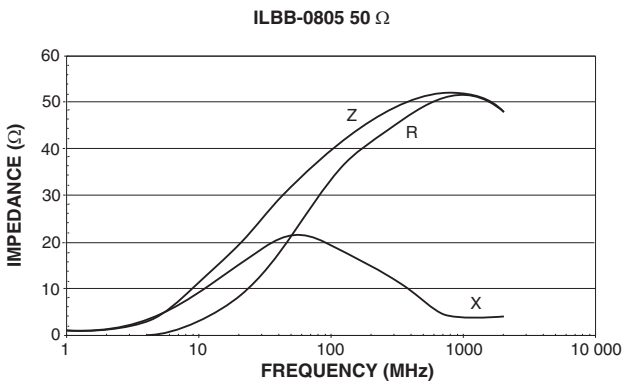
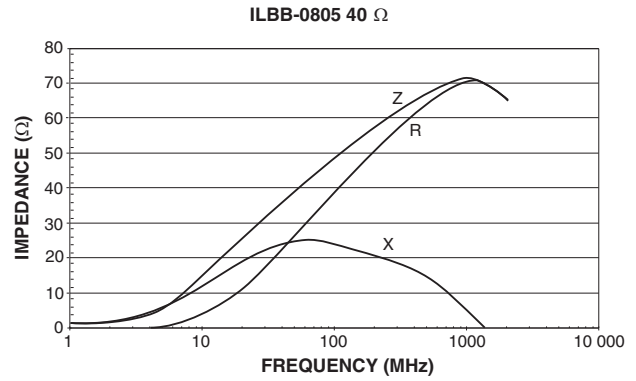
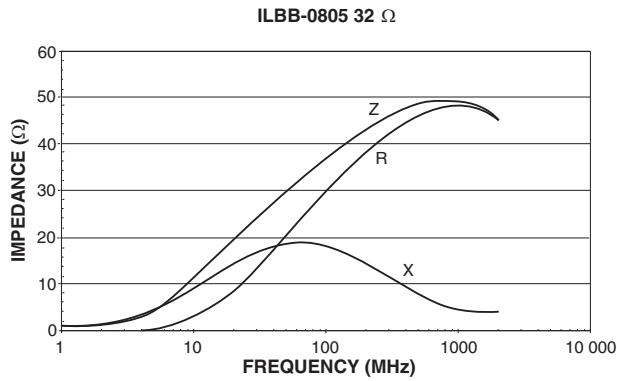
A <sub>0</sub>	0.059 ± 0.004 [1.50 ± 0.1]
B <sub>0</sub>	0.093 ± 0.006 [2.35 ± 0.15]
D <sub>0</sub>	0.059 + 0.004/- 0.000 [1.5 + 0.1/- 0.0]
D <sub>1</sub>	0.039 min. [1.0 min.]
E <sub>1</sub>	0.069 ± 0.004 [1.75 ± 0.1]
F	0.138 ± 0.002 [3.50 ± 0.05]
K <sub>0</sub>	0.049 ± 0.002 [1.24 ± 0.05]
P <sub>0</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**



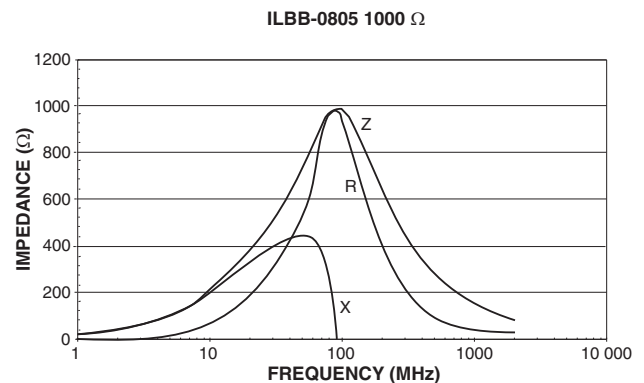
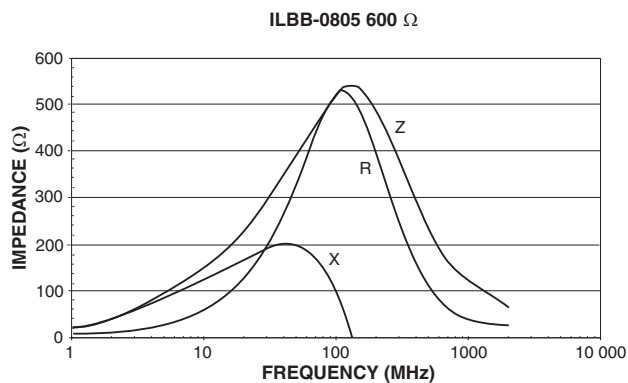
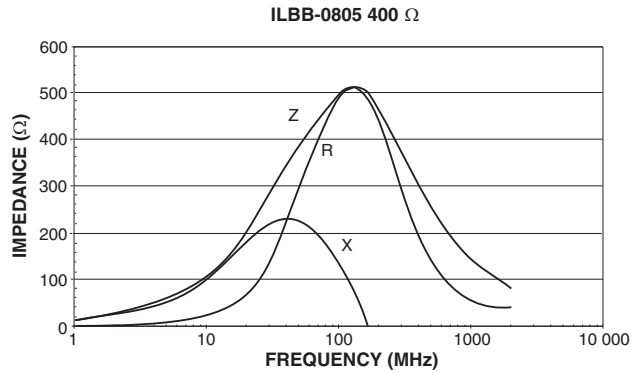
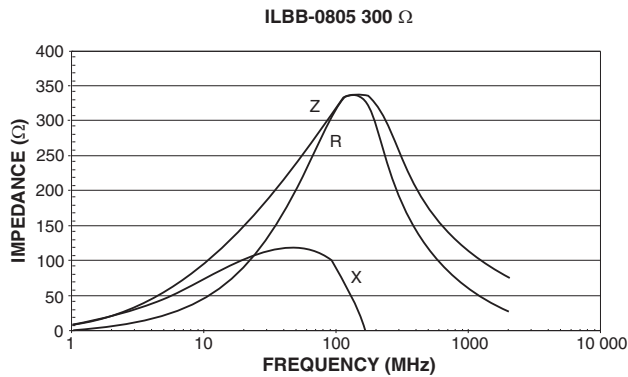
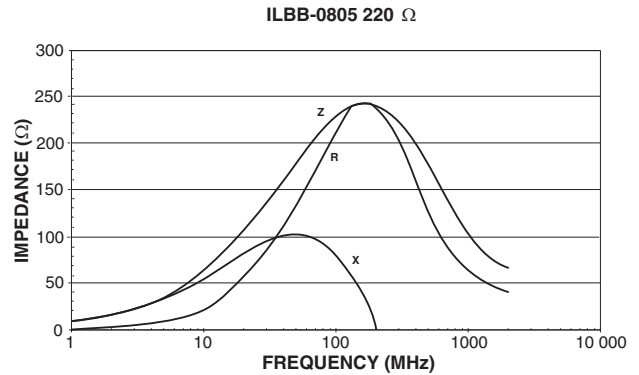
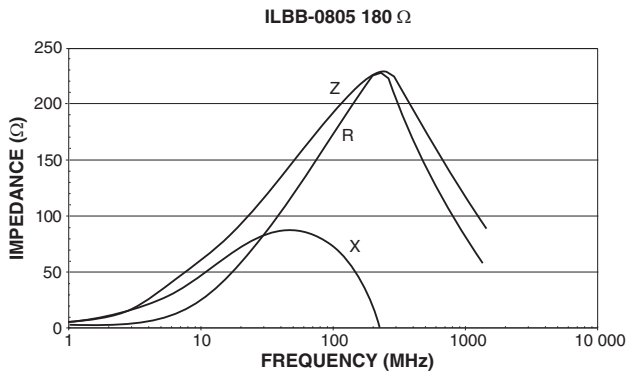
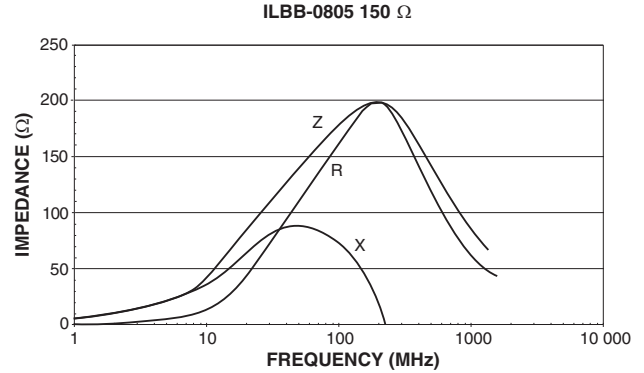
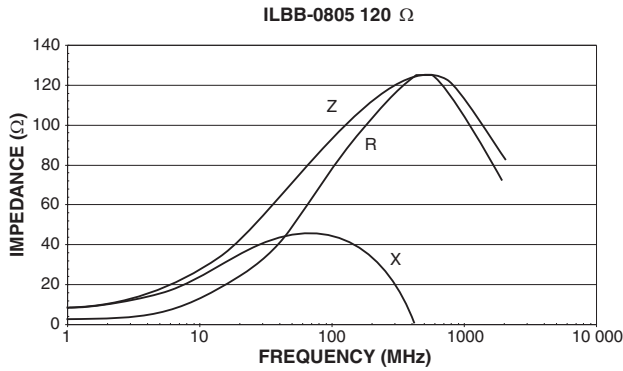


**TYPICAL CURVES - Frequency Characteristics of R, X, and Z**



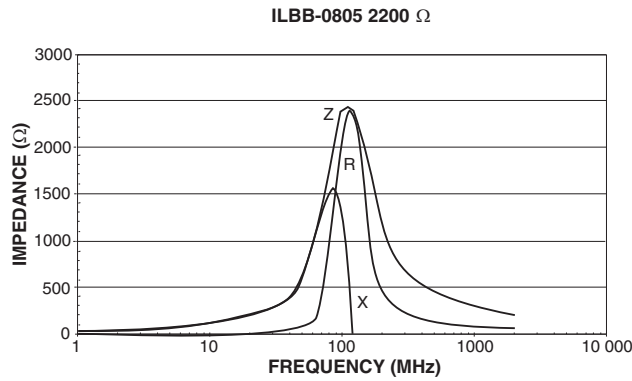
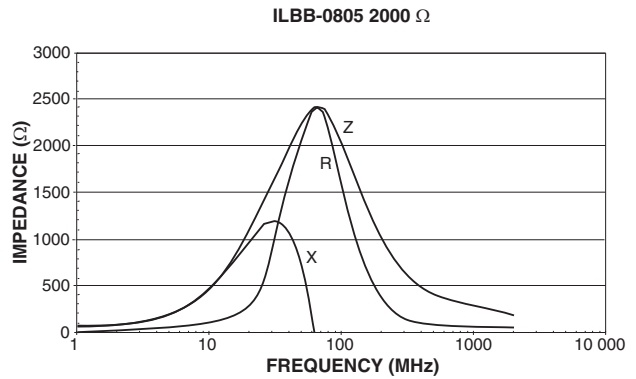
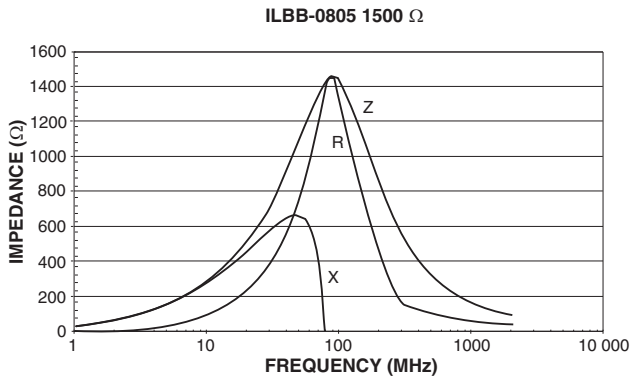


**TYPICAL CURVES - Frequency Characteristics of R, X, and Z**





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





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