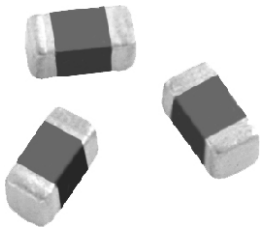
Multilayer Ferrite Beads



FEATURES

- High reliability
- Surface mountable
- Magnetically self shielded
- Nickel barrier plating virtually eliminates silver migration
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

Pb-free

RoHS COMPLIANT

HALOGEN FREE

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: 0.3 kg (0.66 lbs) minimum for 30 s

Beam Strength: 0.3 kg (0.66 lbs) minimum

ENVIRONMENTAL SPECIFICATIONS

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

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

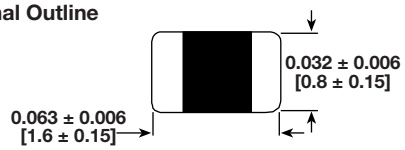
Biased Humidity: 85 % RH at 85 °C, 1000 h at full rated current

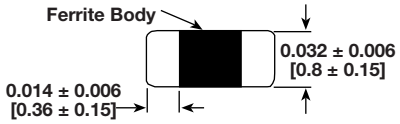
STANDARD ELECTRICAL SPECIFICATIONS

Z ± 25 % AT 100 MHz (Ω)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
10	0.05	500
30	0.09	500
40	0.10	400
60	0.10	400
68	0.10	200
80	0.20	150
120	0.20	150
150	0.30	150
180	0.30	150
220	0.30	150
300	0.35	150
420	0.40	150
450	0.40	100
600	0.45	100
750	0.60	100
1000	0.60	100
1500	0.70	50
2000	0.80	50

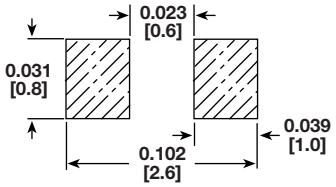
DIMENSIONS in inches [millimeters]

Dimensional Outline





Recommended Pad Layout



PACKAGING OPTIONS

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

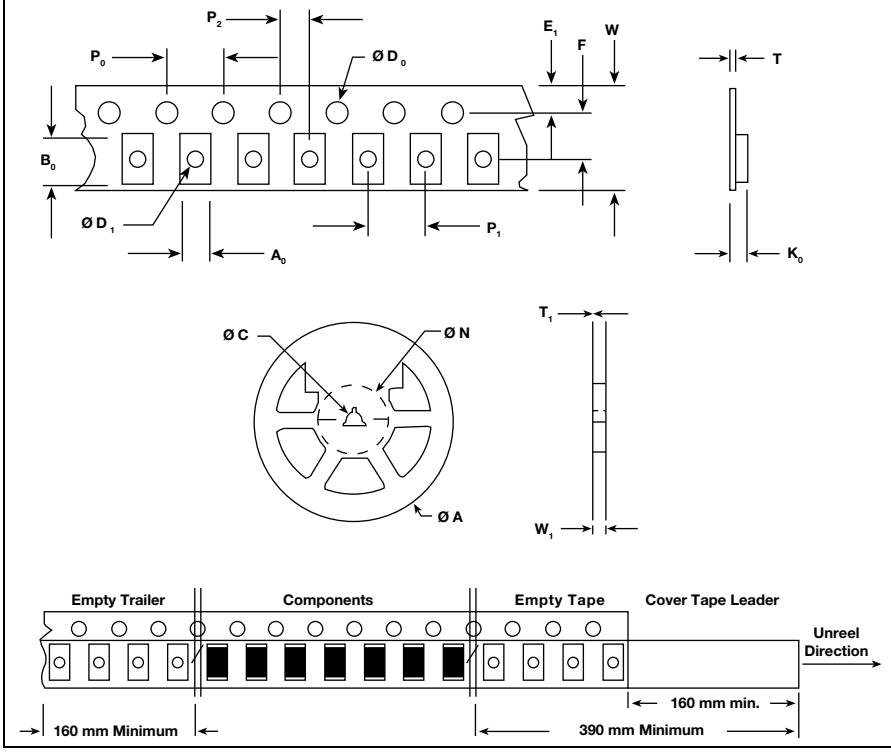
DESCRIPTION

ILBB-0603	30	± 25 %	ER	e3
MODEL	IMPEDANCE VALUE	IMPEDANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

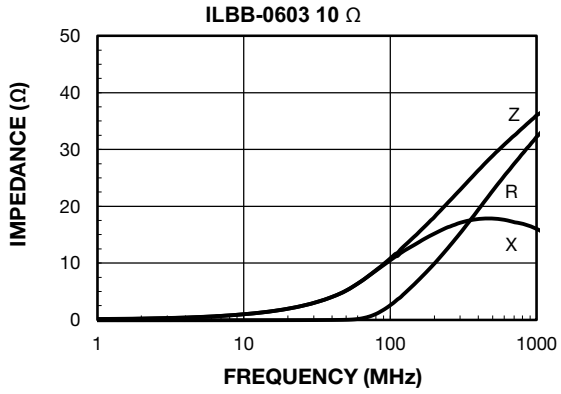
I	L	B	B	0	6	0	3	E	R	3	0	0	V
PRODUCT FAMILY				SIZE				PACKAGE CODE		IMPEDANCE VALUE			IMPEDANCE TOLERANCE

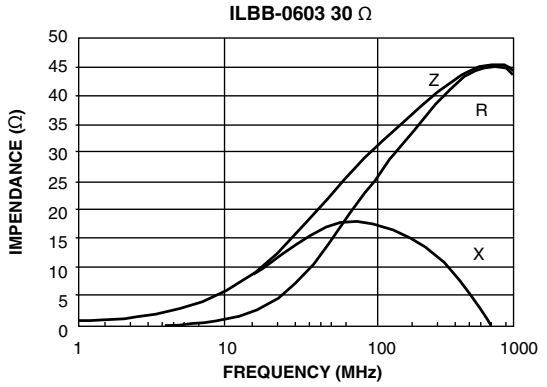
TAPE AND REEL SPECIFICATIONS 0603 SIZE PER EIA-481-1 in inches [millimeters]

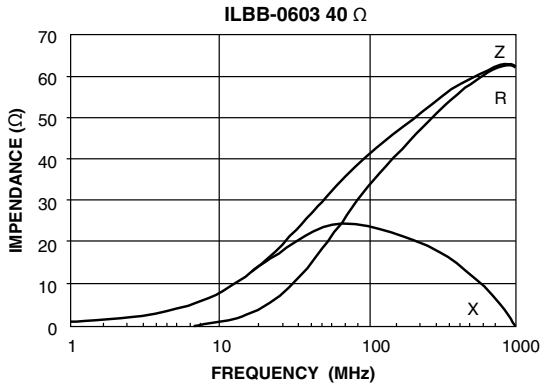


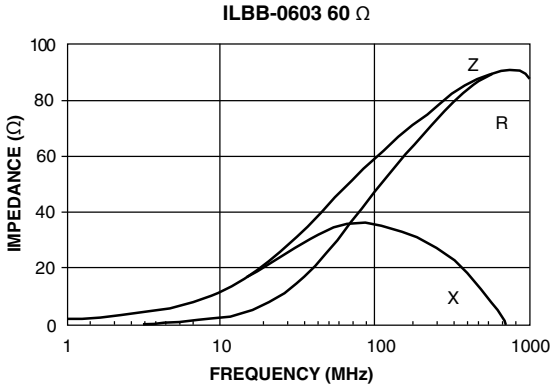
A_0	0.045 ± 0.004 [1.14 ± 0.1]
B_0	0.071 ± 0.008 [1.80 ± 0.2]
D_0	0.059 + 0.004/- 0.000 [1.5 + 0.1/- 0.0]
D_1	0.039 min. [1.0 min.]
E_1	0.069 ± 0.004 [1.75 ± 0.1]
F	0.138 ± 0.002 [3.50 ± 0.05]
K_0	0.045 ± 0.002 [1.15 ± 0.05]
P_0	0.157 ± 0.004 [4.00 ± 0.1]
P_1	0.157 ± 0.004 [4.00 ± 0.1]
P_2	0.079 ± 0.002 [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] min.
C	0.51 ± 0.020/- 0.008 [13.00 ± 0.5/- 0.5]
W_1	0.315 + 0.059/- 0.000 [8.00 + 1.5/- 0.0]
T_1	0.079 ± 0.002 [2.00 ± 0.05]

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



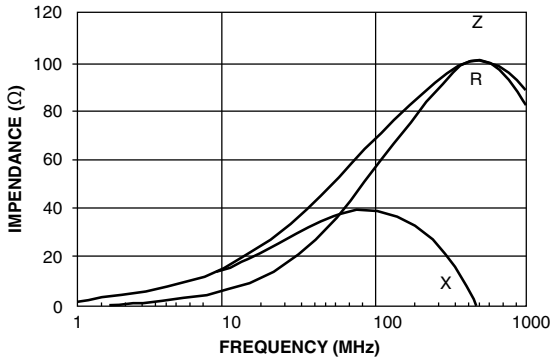




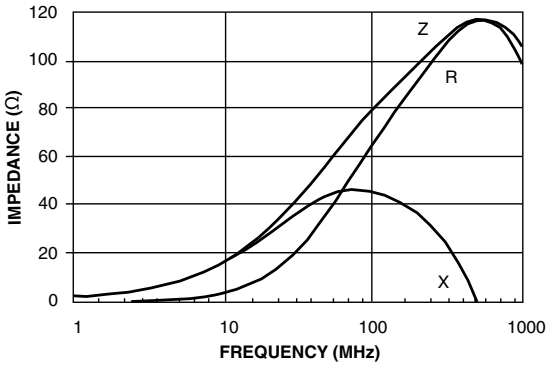


TYPICAL CURVES - Frequency Characteristics of R, X, and Z

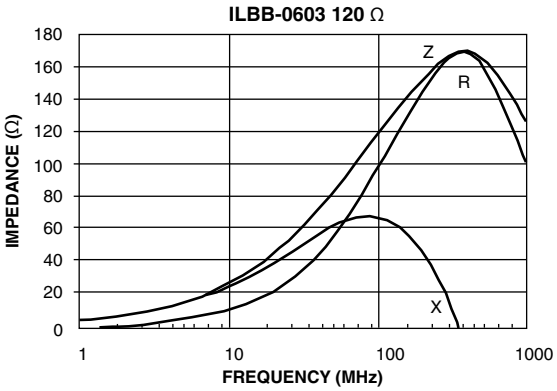
ILBB-0603 68 Ω



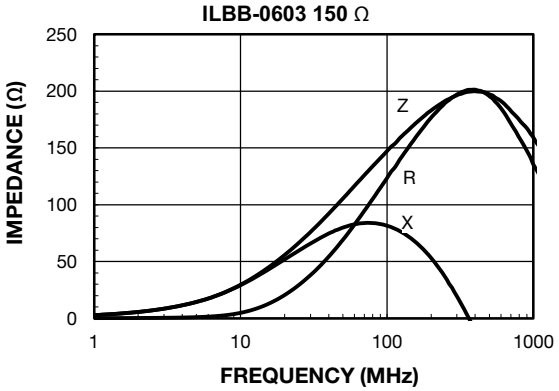
ILBB-0603 80 Ω



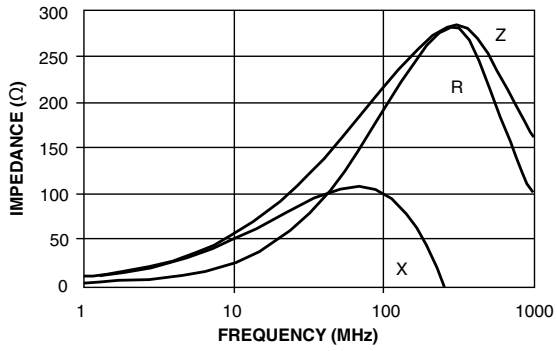
ILBB-0603 120 Ω



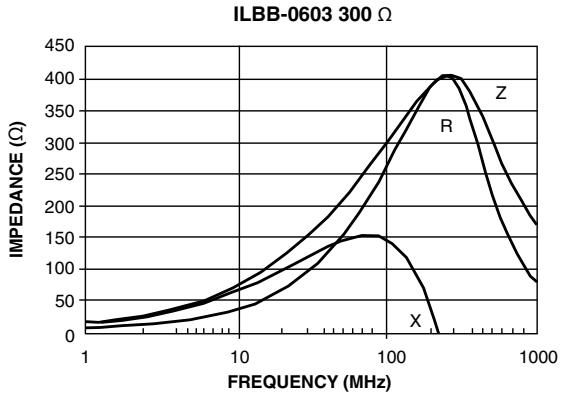
ILBB-0603 150 Ω



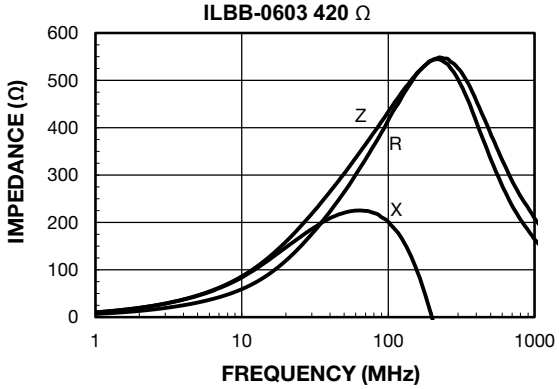
ILBB-0603 220 Ω



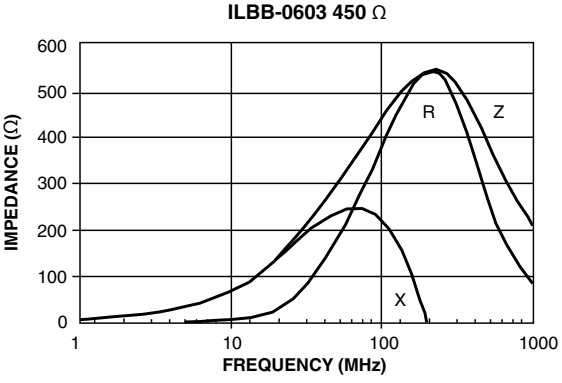
ILBB-0603 300 Ω



ILBB-0603 420 Ω

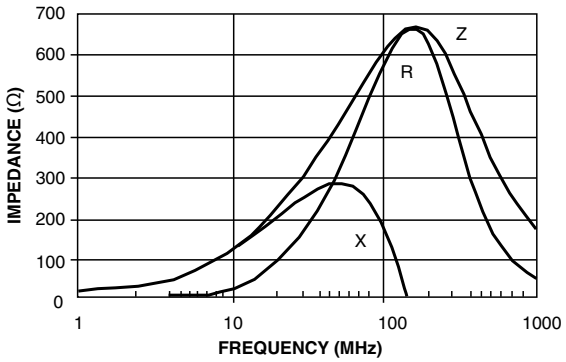


ILBB-0603 450 Ω

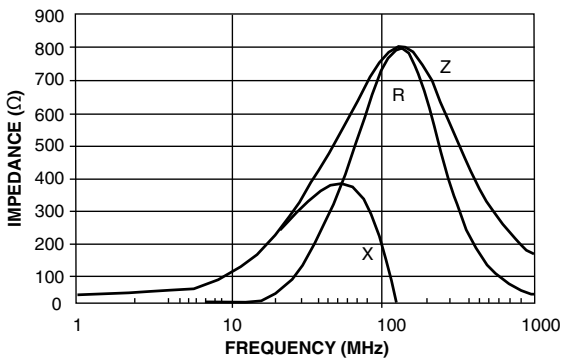


TYPICAL CURVES - Frequency Characteristics of R, X, and Z

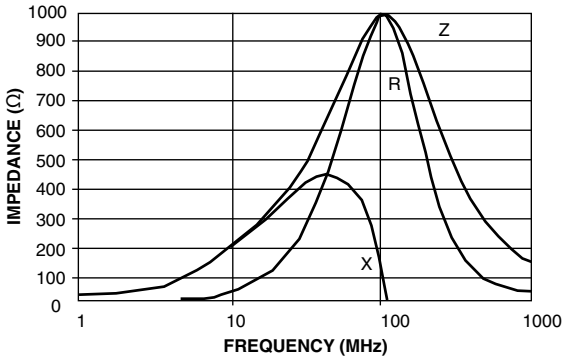
ILBB-0603 600 Ω



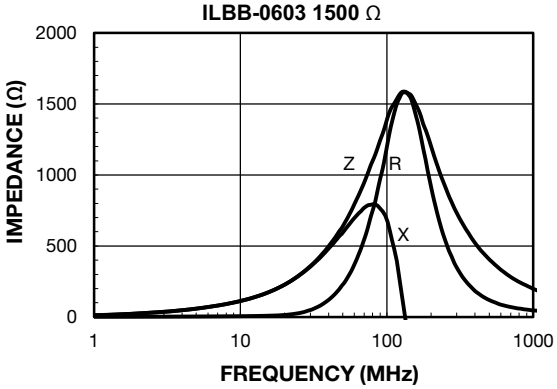
ILBB-0603 750 Ω



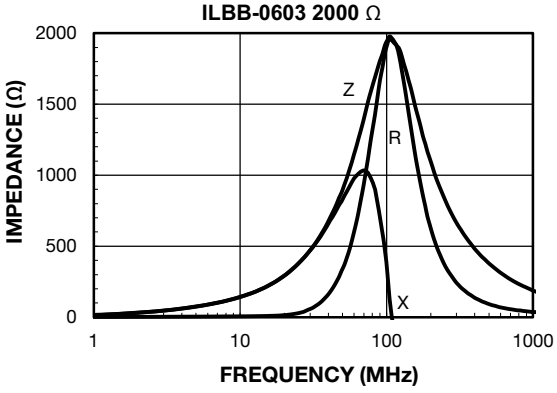
ILBB-0603 1000 Ω



ILBB-0603 1500 Ω



ILBB-0603 2000 Ω



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