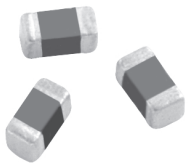
ILBB-0603

Vishay Dale

Multilayer Ferrite Beads



FEATURES

- High reliability.
- Surface mountable.
- Magnetically self shielded.
- Nickel barrier plating virtually eliminates silver migration.

MECHANICAL SPECIFICATIONS*

Solderability: 90% coverage after 5 second dip in 235°C solder following 60 second preheat at 120°C to 150°C and type R flux dip.
Resistance To Solder Heat: 10 seconds in 260°C solder after preheat and flux per above.
Terminal Strength: 0.3 kilograms (0.66 pounds) minimum for 30 seconds.
Beam Strength: 0.3 kilogram (0.66 pounds) 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 hours at full rated current.

STANDARD ELECTRICAL SPECIFICATIONS

Z @ 100MHz (±25%)	DCR MAX. (Ohms)	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

PACKAGING OPTIONS

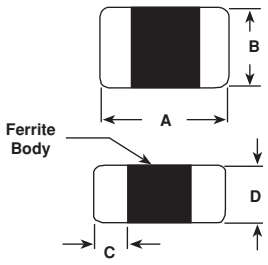
- Tape and Reel:
  Embossed plastic carrier tape
  Per EIA481-1
  4000 pieces on a 7" [178mm] reel

DESCRIPTION

ILBB-0603	30	±25%
MODEL	IMPEDANCE VALUE	IMPEDANCE TOLERANCE

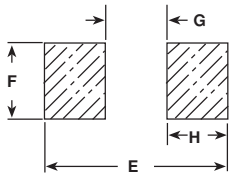
DIMENSIONS in inches [millimeters]

Dimensional Outline



A	B	C	D
0.063 ± .006 [1.6 ± 0.15]	0.032 ± .006 [0.8 ± 0.15]	0.014 ± .006 [0.36 ± 0.15]	0.032 ± .006 [0.8 ± 0.15]

Suggested Pad Layout



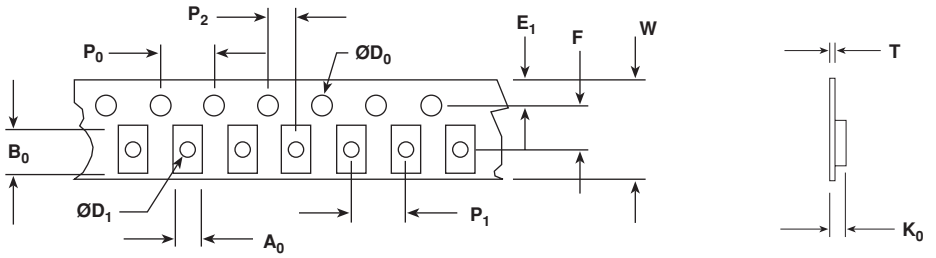
E	F	G	H
0.102 [2.6]	0.031 [0.8]	0.023 [0.6]	0.039 [1.0]

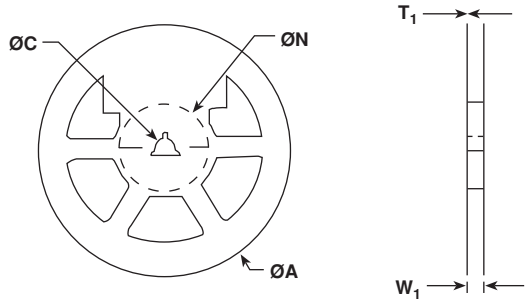
SAP PART NUMBERING GUIDELINES (INTERNAL)

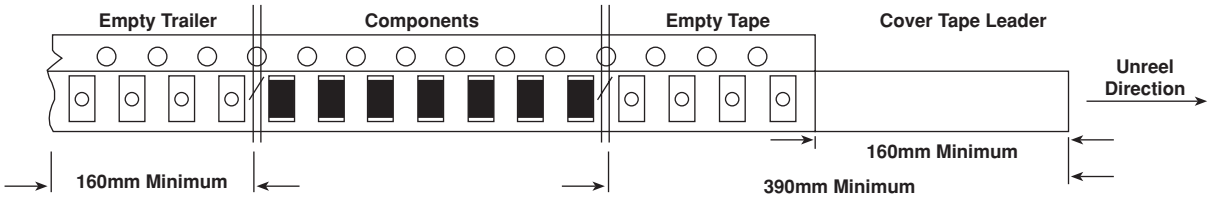
I	L	B	B	0	6	0	3	R	K	3	0	0	V
PRODUCT FAMILY				SIZE				PACKAGE CODE		IMPEDANCE VALUE			TOL.

See the end of this data book for conversion tables

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



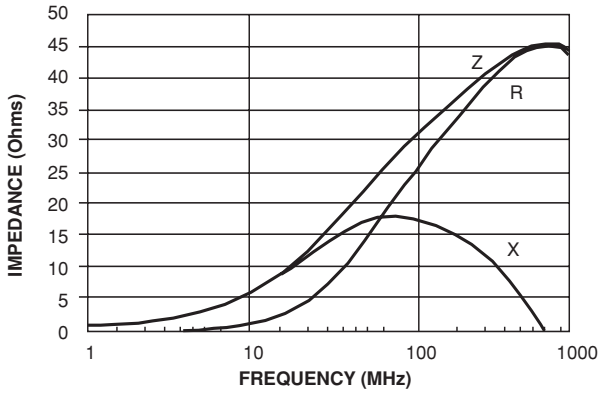




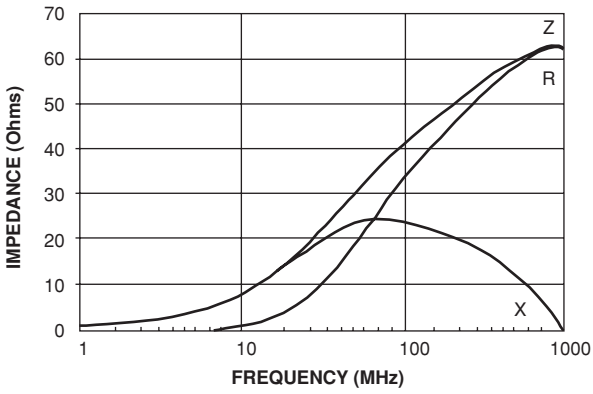
A_0	0.045 ± .004 [1.14 ± 0.1]	P_2	0.079 ± .002 [2.00 ± 0.05]
B_0	0.071 ± .008 [1.80 ± 0.2]	W	0.327 Max. [8.3 Max.]
D_0	0.059 + .004/- 0.000 [1.5 + 0.1]	T	0.008 ± .002 [0.2 ± 0.05]
D_1	0.039 Min. [1.0 Min.]	A	7.000 ± .079 [178.0 ± 2.0]
E_1	0.069 ± .004 [1.75 ± 0.1]	N	2.500 [63.5] Min.
F	0.138 ± .002 [3.50 ± 0.05]	C	0.51 + 0.02/- 0.008 [13 + 0.5]
K_0	0.045 ± .002 [1.15 ± 0.05]	W_1	0.315 + 0.059/- 0.00 [8.00 ± 1.50]
P_0	0.157 ± .004 [4.00 ± 0.1]	T_1	0.079 ± .002 [2.00 ± 0.05]
P_1	0.157 ± .004 [4.00 ± 0.1]		

TYPICAL CURVES - FREQUENCY CHARACTERISTICS OF R, X AND Z

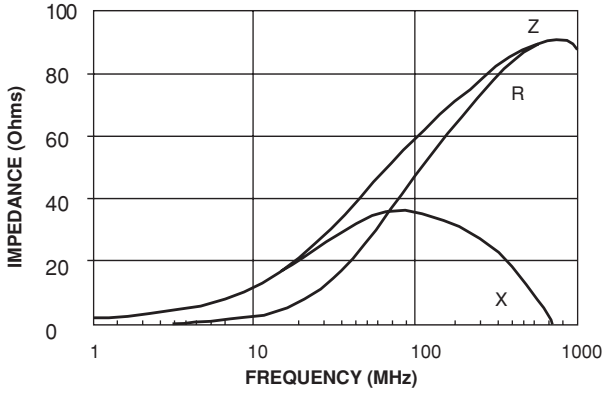
ILBB-0603 30Ω



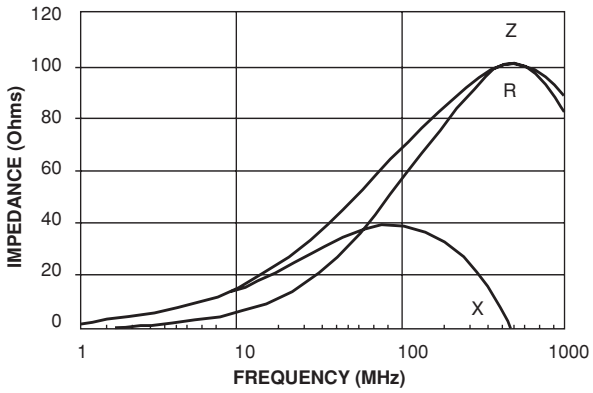
ILBB-0603 40Ω



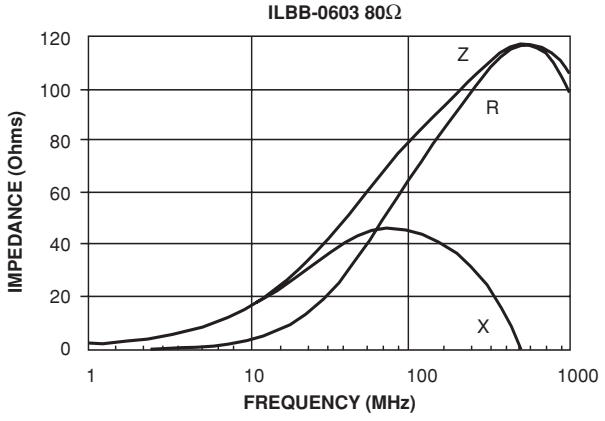
ILBB-0603 60Ω



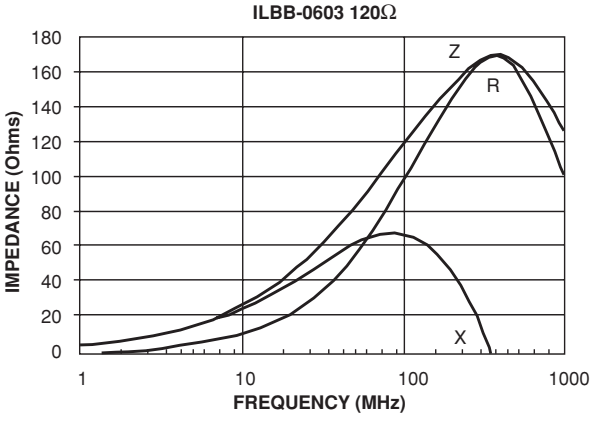
ILBB-0603 68Ω



ILBB-0603 80Ω

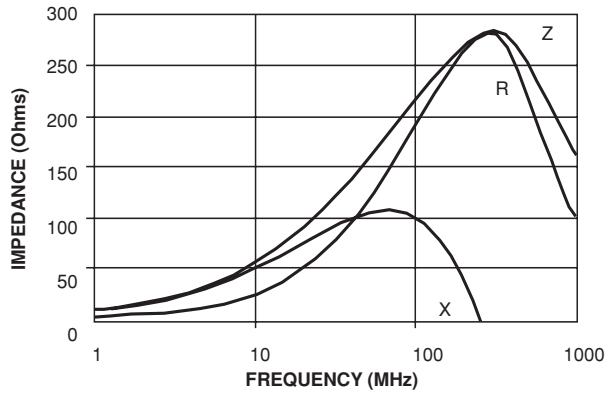


ILBB-0603 120Ω

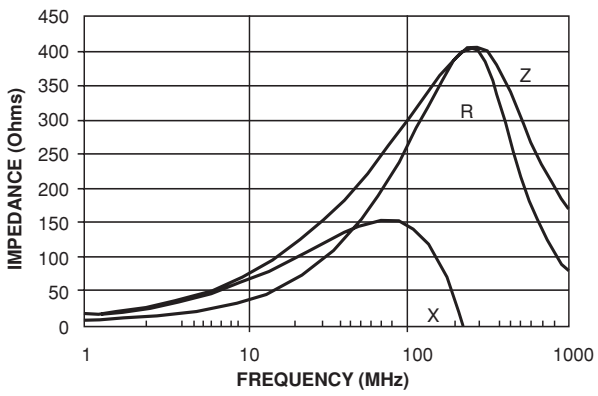


TYPICAL CURVES - FREQUENCY CHARACTERISTICS OF R, X AND Z

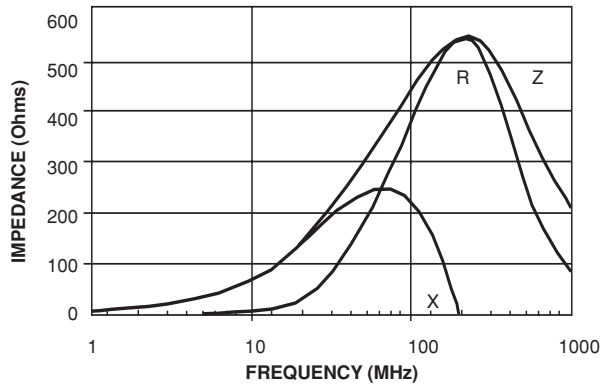
ILBB-0603 220Ω



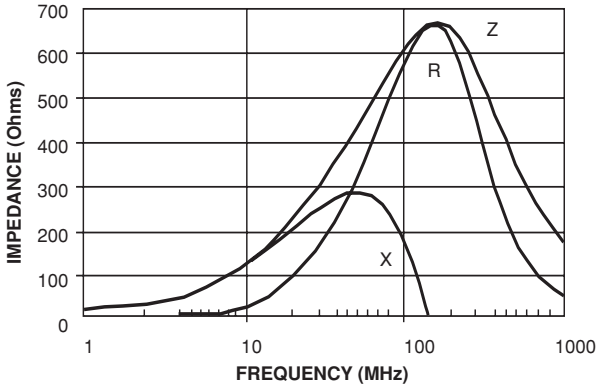
ILBB-0603 300Ω



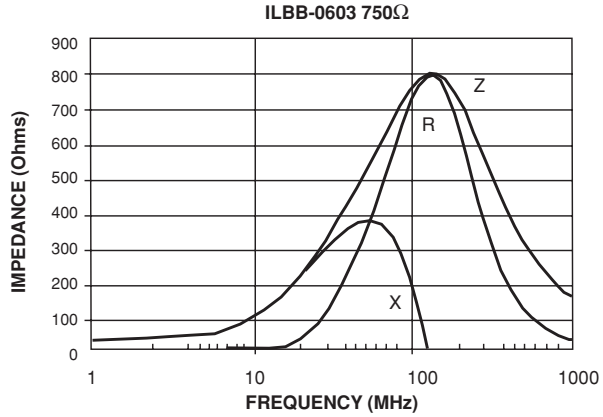
ILBB-0603 450Ω



ILBB-0603 600Ω



ILBB-0603 750Ω



ILBB-0603 1000Ω