



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Medium Current Ferrite Chip Beads

Steward's surface mount ferrite chips provide compact, cost effective EMI filtering for densely packed PCB designs. The small footprint enables placement very close to troublesome high frequency devices. Our proprietary SMT construction yields rugged components with superior impedance vs. frequency characteristics.

Features:

- Small footprint • Excellent retention under Bias • Rugged, monolithic construction • Superior impedance vs. frequency characteristics
- Economical • Broad range of sizes (from 0603 up to 1812) • Broad range of impedance values and current ratings

Applications:

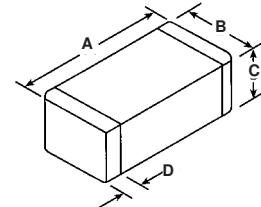
- Filtering of power input pins and devices using high speed clocks • Filtering of low frequency input/output signals of shielded enclosures • High frequency filtering of medium speed clocks and video signals • Preventing oscillations in high frequency amplifiers
- Data bus filtration • Discrete component filtration in power supplies

Test Specifications:

- Maximum current ratings are determined by testing to a maximum temperature rise of 40° C with continuous operating current
- Board level components are rated up to a maximum of 75 volts

Tested with: • HP4396A (100KHz - 1.8 GHz) or HP8753 (to 6 GHz) Network/Spectrum Analyzer • HP43961A Impedance Test Kit
• HP16192A Test Fixture or Inter-Continental Microwave custom fixtures • HP16200A DC Bias Adapter • Philips PM2811 DC Power Supply • Ambient Temperature 23.5°C ± 2° • Bandwidth 3 kHz • Sweep Time 423 ms • Impedance is rated at ± 25% @100MHz

PART NUMBERING SYSTEM					
MI	0603	K	300	R	- 00
PRODUCT SERIES CODE	PART SIZE CODE	RATED CURRENT CODE	IMPEDANCE VALUE CODE	PACKAGING CODE	ADDITIONAL PART DESCRIPTION



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

PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	IMPEDANCE (Z) TYPICAL OHMS @ 100MHz 500MHz 1GHz			DCR MAX OHMS	RATED I MAX (continuous) mA	
MI0603K300R-00	1.60 ± 0.15 (0.063 ± 0.006)	0.80 ± 0.15 (0.031 ± 0.006)	0.80 ± 0.15 (0.031 ± 0.006)	0.36 ± 0.15 (0.014 ± 0.006)	30	41	43	0.090	1,500	
MI0603J600R-00	1.60 ± 0.15 (0.063 ± 0.006)	0.80 ± 0.15 (0.031 ± 0.006)	0.80 ± 0.15 (0.031 ± 0.006)	0.36 ± 0.15 (0.014 ± 0.006)	60	92	103	0.100	1,000	
MI0603J680R-00	1.60 ± 0.15 (0.063 ± 0.006)	0.80 ± 0.15 (0.031 ± 0.006)	0.80 ± 0.15 (0.031 ± 0.006)	0.36 ± 0.15 (0.014 ± 0.006)	68	106	99	0.100	1,000	
*	MI0805J070R-00	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	7	23	28	0.100	1,000
	MI0805K110R-00	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	11	18	19	0.060	1,500
	MI0805K170R-00	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	17	24	24	0.060	1,500
	MI0805K260R-00	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	26	43	45	0.060	1,500
	MI0805K320R-00	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	32	51	51	0.060	1,500
	MI0805K400R-00	2.00 ± 0.20 (0.079 ± 0.008)	1.25 ± 0.20 (0.049 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	40	60	63	0.050	1,500
	MI1206K260R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	26	38	40	0.060	1,500
	MI1206K310R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	31	45	50	0.080	1,500
	MI1206J700R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	70	104	107	0.100	1,000
	MI1206K900R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	90	142	158	0.080	1,500

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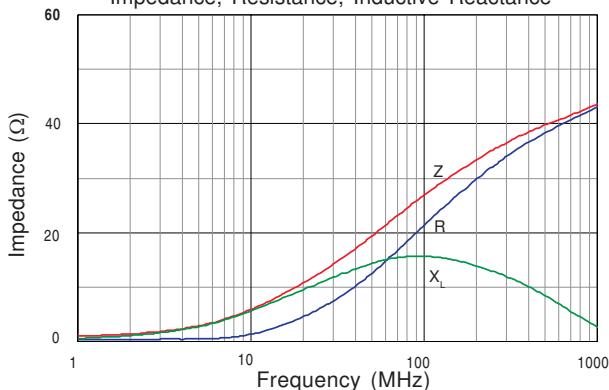
PART NUMBER	A mm (inches)	B mm (inches)	C mm (inches)	D mm (inches)	IMPEDANCE (Z) TYPICAL OHMS @ 100MHz 500MHz 1GHz			DCR MAX OHMS	RATED I MAX (continuous) mA
MI1206K101R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	100	146	152	0.075	1,500
MI1206L501R-00	3.20 ± 0.20 (0.126 ± 0.008)	1.60 ± 0.20 (0.063 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	0.51 ± 0.25 (0.020 ± 0.010)	500	150	82	0.060	2,000
MI1806J800R-00	4.50 ± 0.25 (0.177 ± 0.010)	1.60 ± 0.25 (0.063 ± 0.010)	1.60 ± 0.25 (0.063 ± 0.010)	0.51 ± 0.25 (0.020 ± 0.010)	80	129	131	0.150	1,000
MI1812K121R-00	4.50 ± 0.25 (0.177 ± 0.010)	3.20 ± 0.25 (0.126 ± 0.010)	1.40 ± 0.25 (0.055 ± 0.010)	0.51 ± 0.25 (0.020 ± 0.010)	120	198	213	0.060	1,500

* See Steward web site at www.steward.com for the most recent performance curves

MI0603K300R-00

Z, R, X_L vs. Frequency

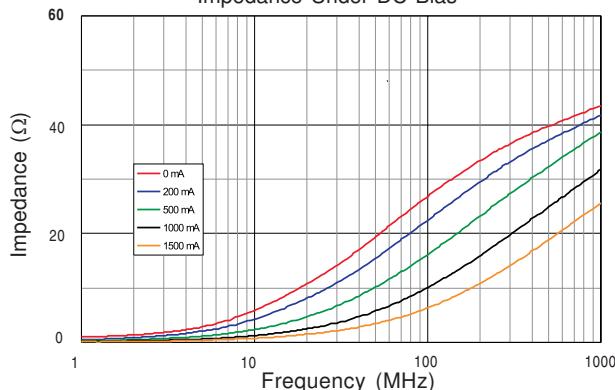
Impedance, Resistance, Inductive Reactance



MI0603K300R-00

Z vs. Frequency

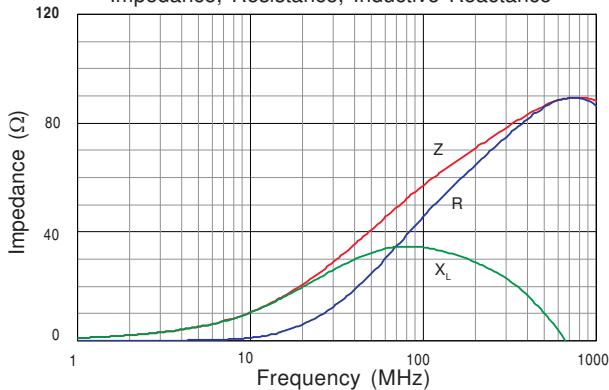
Impedance Under DC Bias



MI0603J600R-00

Z, R, X_L vs. Frequency

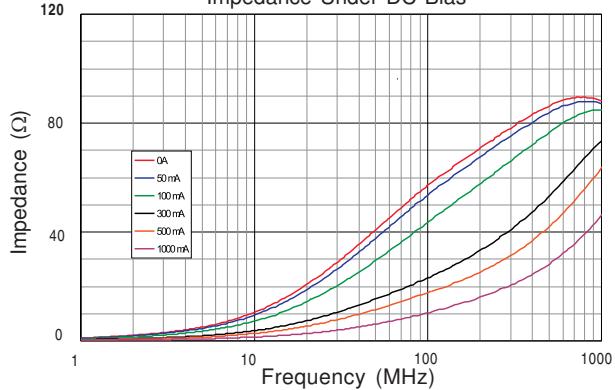
Impedance, Resistance, Inductive Reactance



MI0603J600R-00

Z vs. Frequency

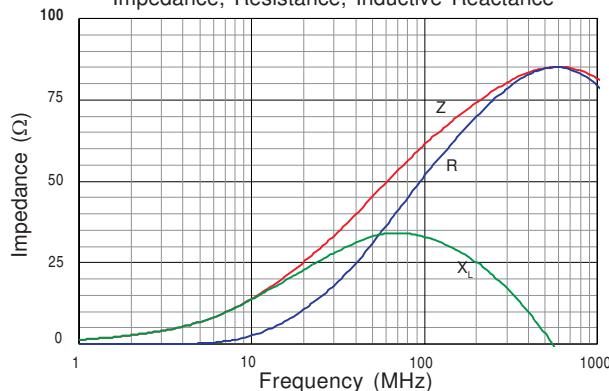
Impedance Under DC Bias



MI0603J680R-00

Z, R, X_L vs. Frequency

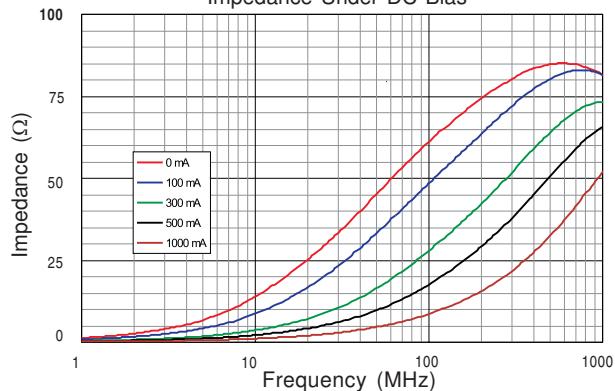
Impedance, Resistance, Inductive Reactance

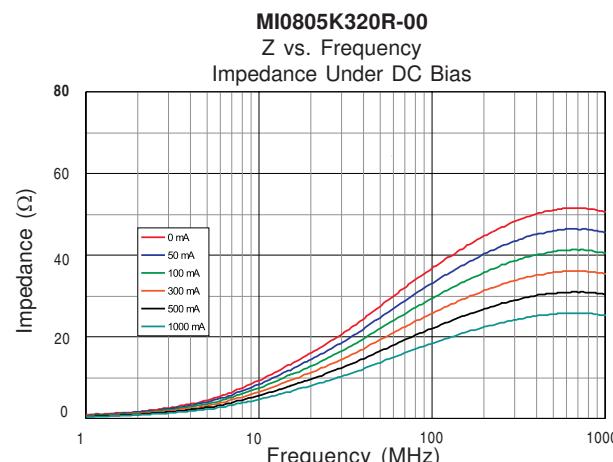
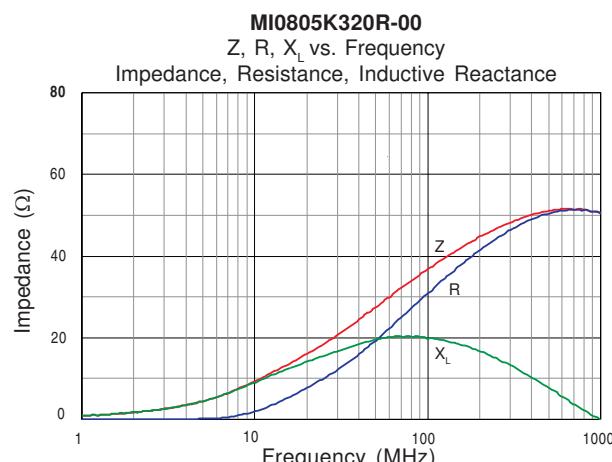
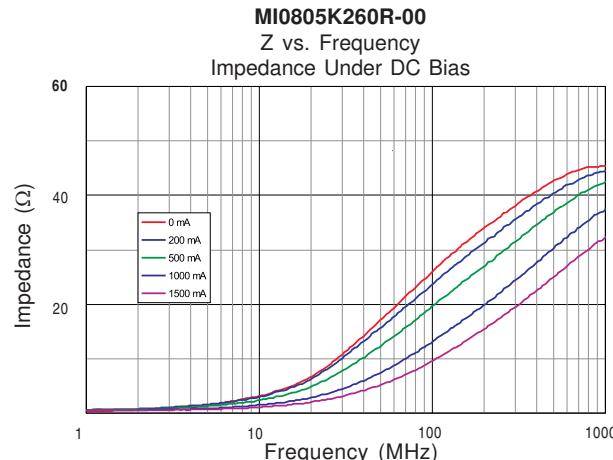
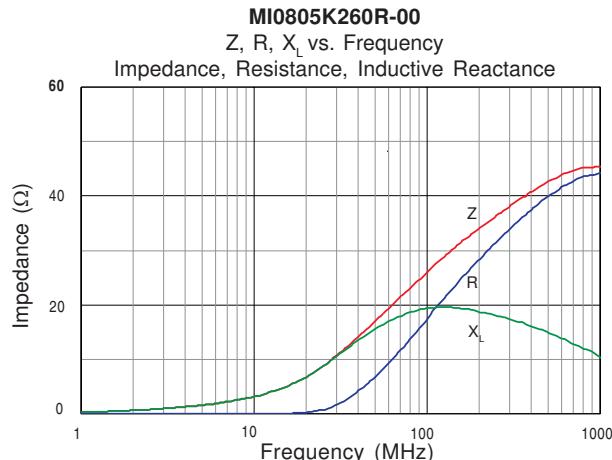
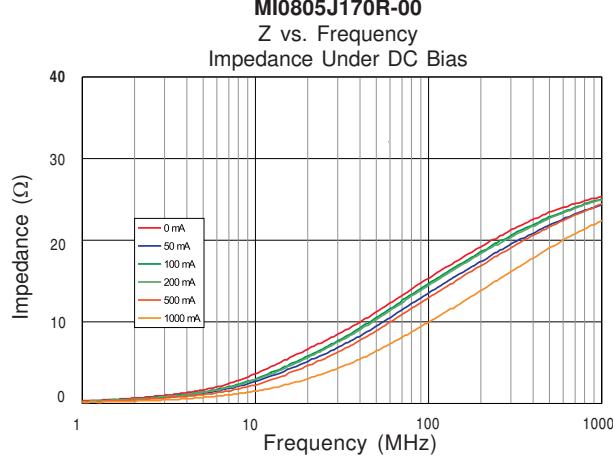
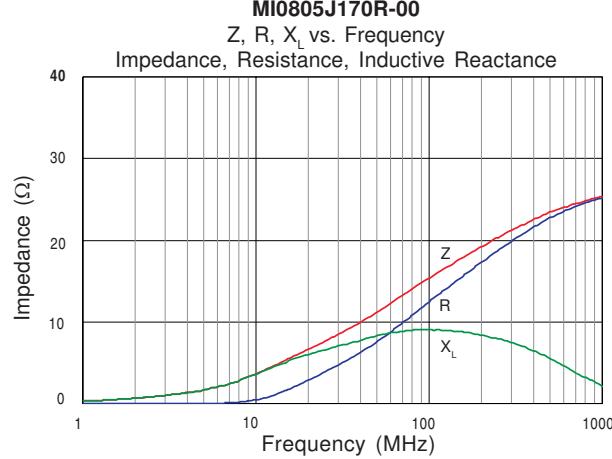
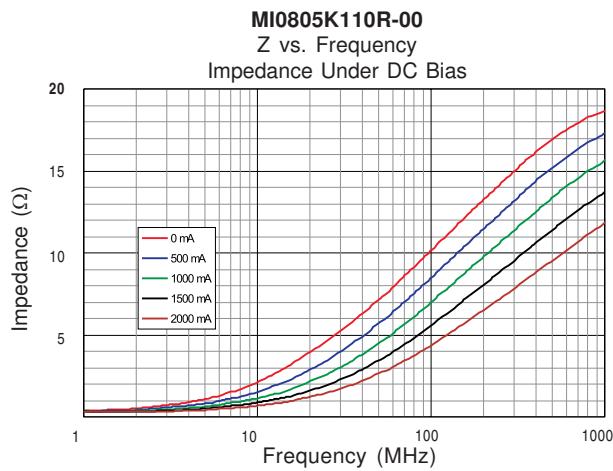
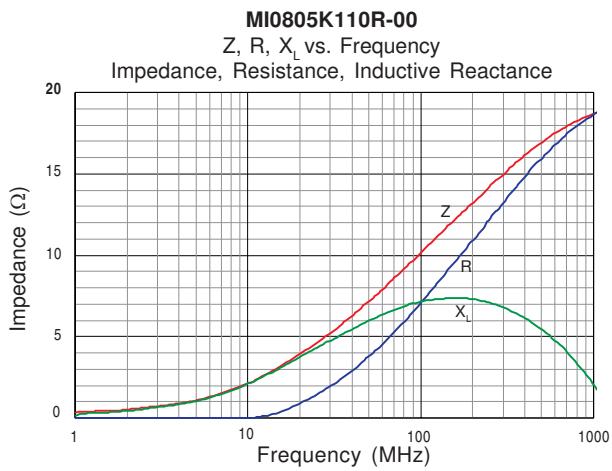


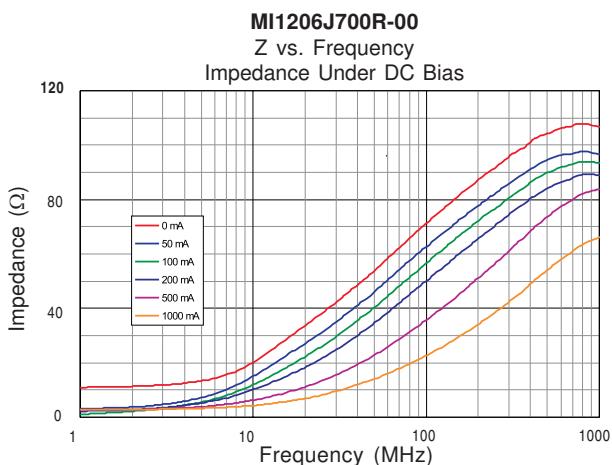
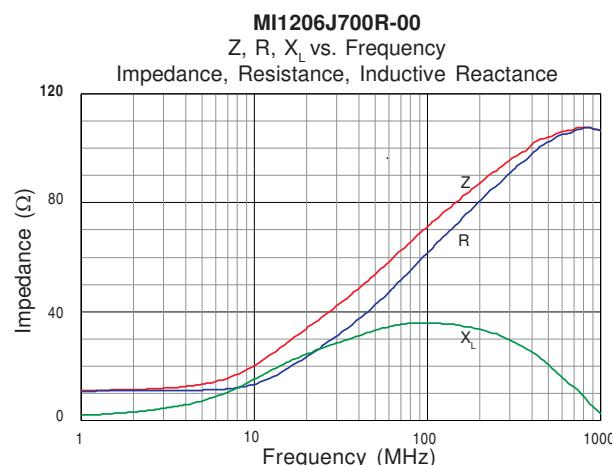
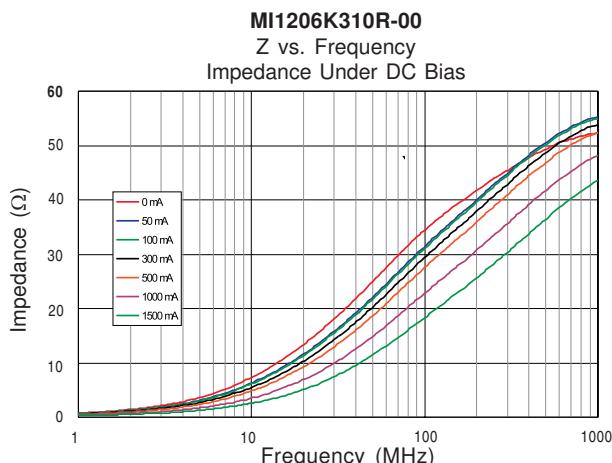
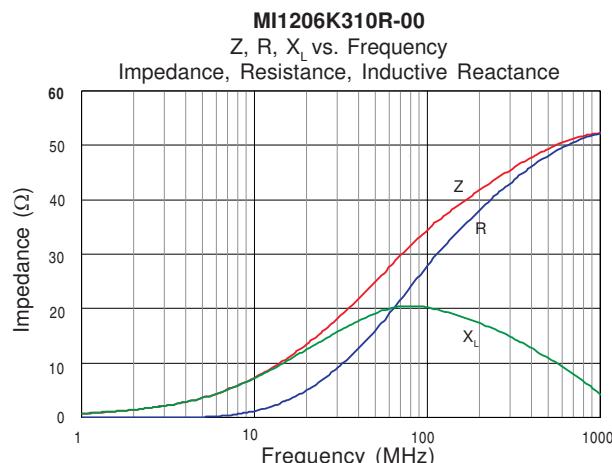
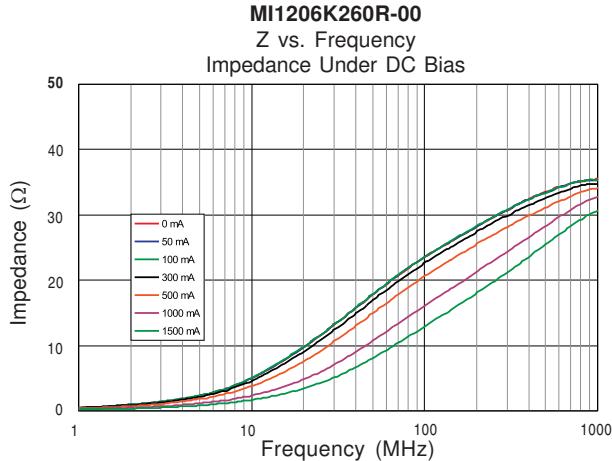
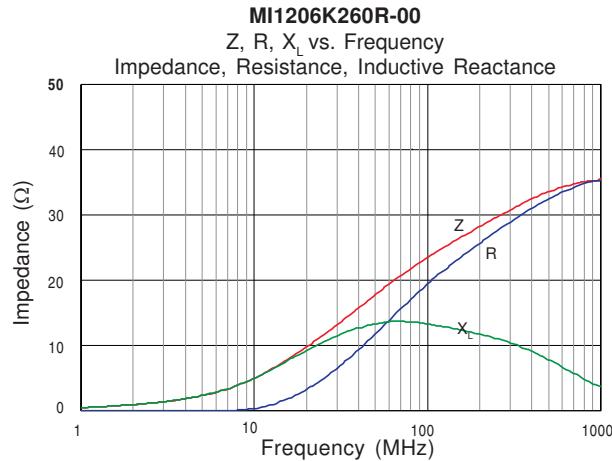
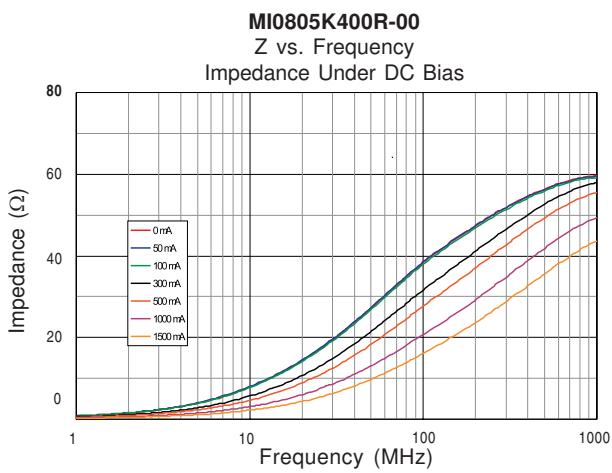
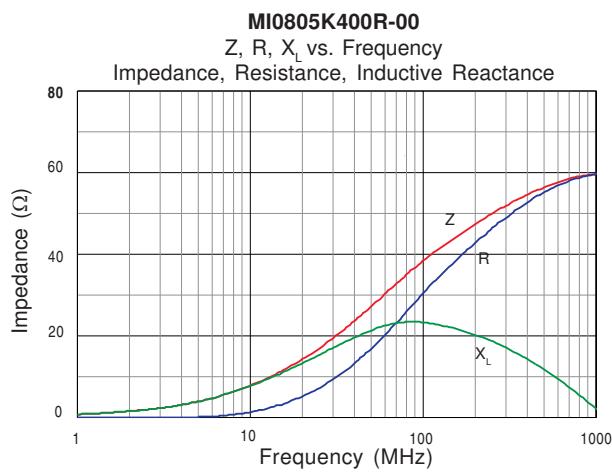
MI0603J680R-00

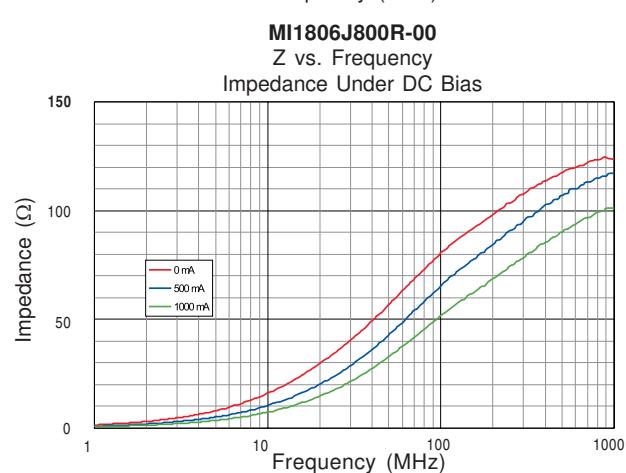
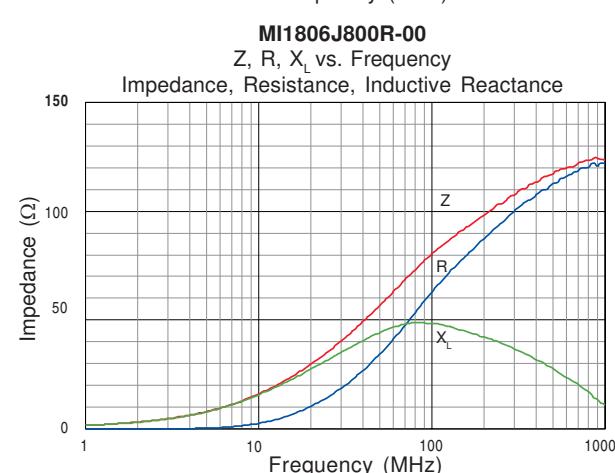
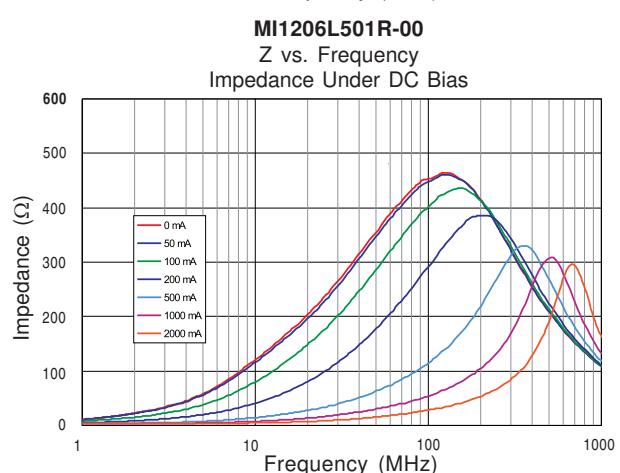
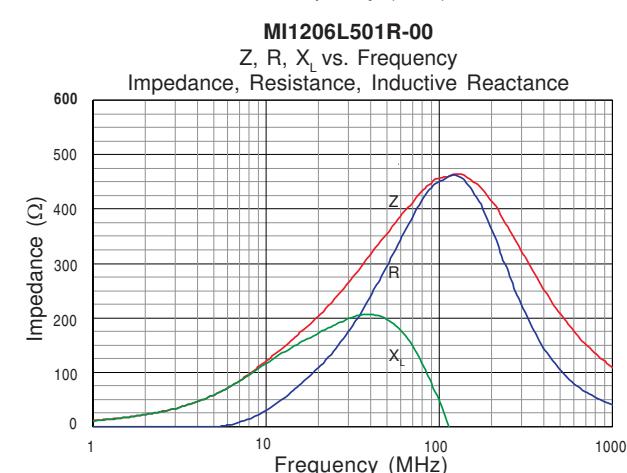
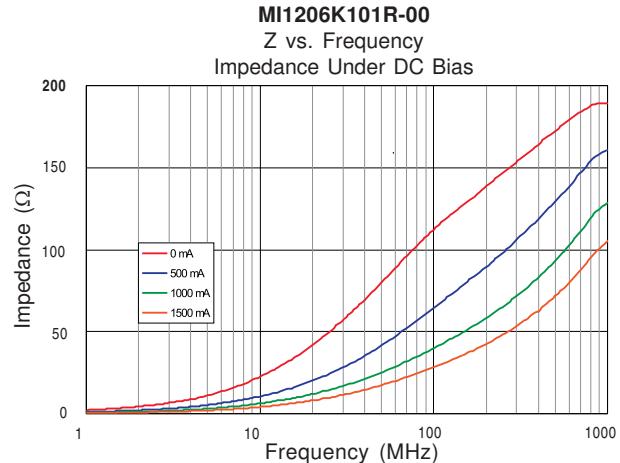
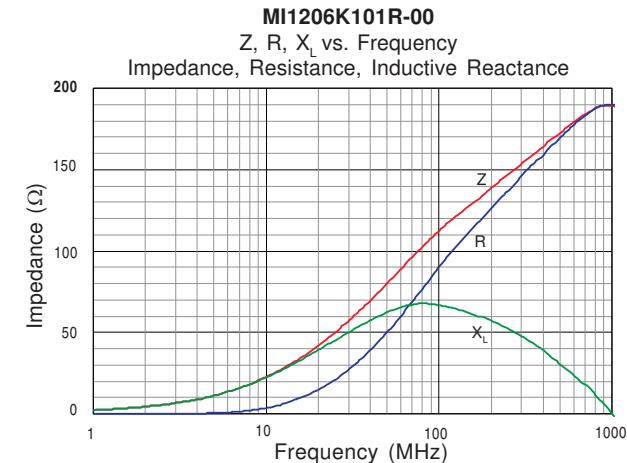
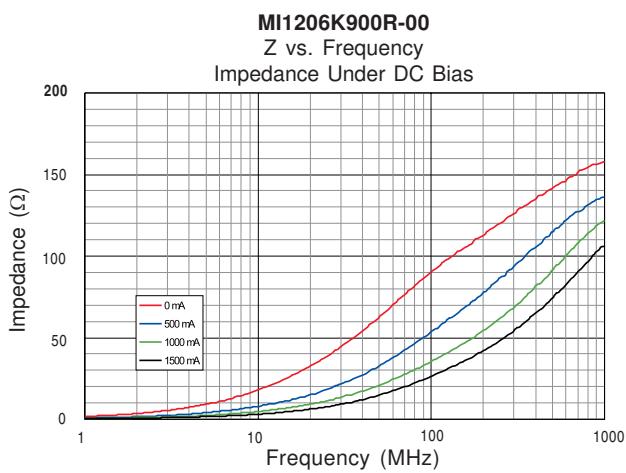
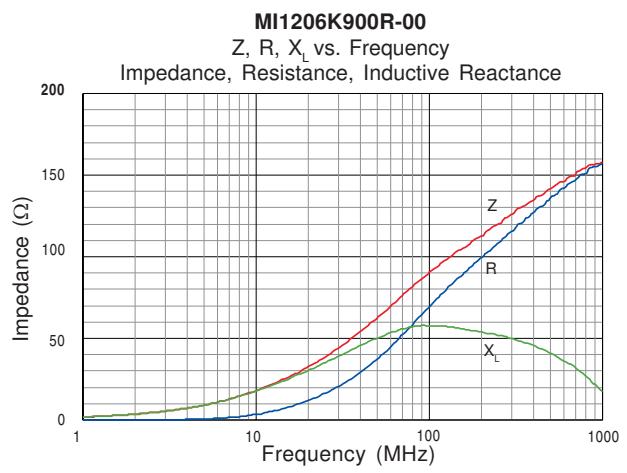
Z vs. Frequency

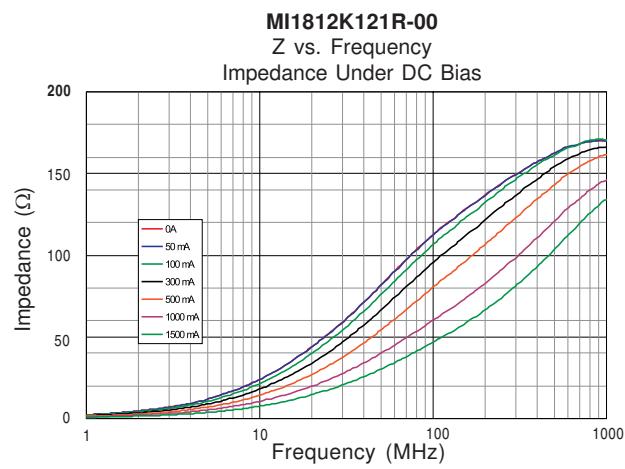
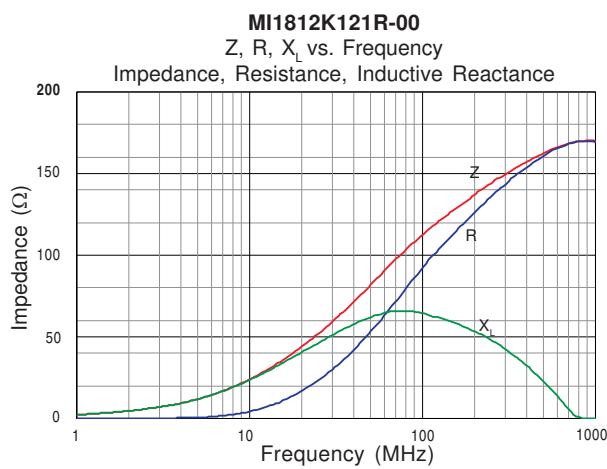
Impedance Under DC Bias





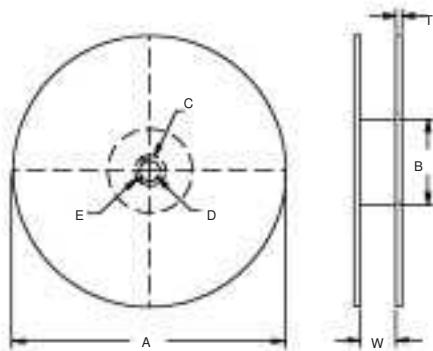




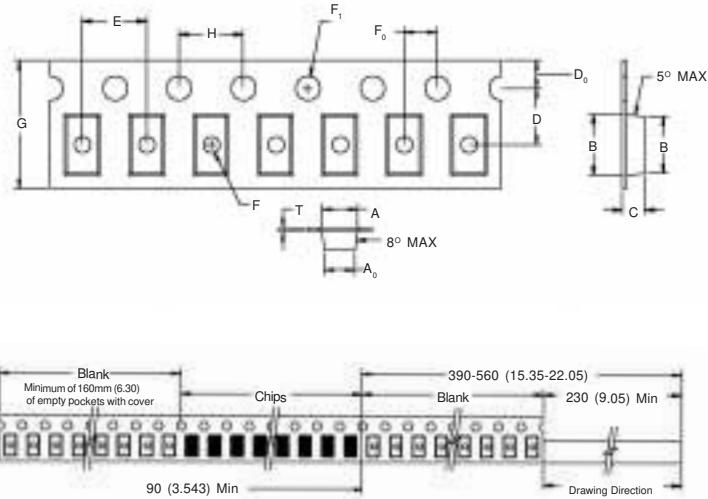


Tape & Reel Specifications

MI Tape Specifications															
P/N	A	A ₀	B	B ₀	C	D	D ₀	E	F	F ₀	F ₁	G	H	T	Reel Size
MI0603	2.21 (0.087)	1.88 ± 0.10 (0.074 ± 0.004)	3.76 (0.148)	3.56 ± 0.10 (0.140 ± 0.004)	1.91 ± 0.10 (0.075 ± 0.004)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	1.00 ± 0.25 (0.039 ± 0.010)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.10 (0.059 ± 0.004)	8.00 + 0.30 / - 0.10 (0.315 + 0.012 / - 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	0.25 ± 0.013 (0.010 ± 0.0005)	7"
MI0805	1.85 (0.073)	1.55 ± 0.10 (0.061 ± 0.004)	2.49 (0.098)	2.31 ± 0.10 (0.091 ± 0.004)	1.30 ± 0.10 (0.051 ± 0.004)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	1.00 ± 0.25 (0.039 ± 0.010)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.10 (0.059 ± 0.004)	8.00 + 0.30 / - 0.10 (0.315 + 0.012 / - 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	0.25 ± 0.013 (0.010 ± 0.0005)	7"
MI0805K	1.85 (0.073)	1.55 ± 0.10 (0.061 ± 0.004)	2.49 (0.098)	2.31 ± 0.10 (0.091 ± 0.004)	1.91 ± 0.10 (0.051 ± 0.004)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	1.00 ± 0.25 (0.039 ± 0.010)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.10 (0.059 ± 0.004)	8.00 + 0.30 / - 0.10 (0.315 + 0.012 / - 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	0.25 ± 0.013 (0.010 ± 0.0005)	7"
MI1206	2.21 (0.087)	1.88 ± 0.10 (0.074 ± 0.004)	3.76 (0.148)	3.56 ± 0.10 (0.140 ± 0.004)	1.40 ± 0.10 (0.055 ± 0.004)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	1.00 ± 0.25 (0.039 ± 0.010)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.10 (0.059 ± 0.004)	8.00 + 0.30 / - 0.10 (0.315 + 0.012 / - 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	0.25 ± 0.013 (0.010 ± 0.0005)	7"
MI1206K	2.21 (0.087)	1.88 ± 0.10 (0.074 ± 0.004)	3.76 (0.148)	3.56 ± 0.10 (0.140 ± 0.004)	1.91 ± 0.10 (0.075 ± 0.004)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	1.00 ± 0.25 (0.039 ± 0.010)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.10 (0.059 ± 0.004)	8.00 + 0.30 / - 0.10 (0.315 + 0.012 / - 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	0.25 ± 0.013 (0.010 ± 0.0005)	13"
MI1206L	2.21 (0.087)	1.88 ± 0.10 (0.074 ± 0.004)	3.76 (0.148)	3.56 ± 0.10 (0.140 ± 0.004)	1.10 ± 0.10 (0.043 ± 0.004)	3.50 ± 0.05 (0.138 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	1.00 ± 0.25 (0.039 ± 0.010)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.10 (0.059 ± 0.004)	8.00 + 0.30 / - 0.10 (0.315 + 0.012 / - 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	0.25 ± 0.013 (0.010 ± 0.0005)	13"
MI1806	2.46 (0.097)	1.98 ± 0.10 (0.078 ± 0.004)	5.23 (0.206)	4.88 ± 0.10 (0.192 ± 0.004)	1.98 ± 0.10 (0.078 ± 0.004)	5.50 ± 0.05 (0.217 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	1.50 ± 0.25 (0.059 ± 0.010)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.10 (0.059 ± 0.004)	12.00 + 0.30 / - 0.10 (0.472 + 0.012 / - 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	0.29 ± 0.013 (0.011 ± 0.0005)	7"
MI1812	3.99 (0.157)	3.51 ± 0.10 (0.138 ± 0.004)	5.08 (0.200)	4.78 ± 0.10 (0.188 ± 0.004)	1.73 ± 0.10 (0.068 ± 0.004)	5.50 ± 0.05 (0.217 ± 0.002)	1.75 ± 0.10 (0.069 ± 0.004)	8.00 ± 0.10 (0.315 ± 0.004)	1.50 ± 0.25 (0.059 ± 0.010)	2.00 ± 0.05 (0.079 ± 0.002)	1.50 ± 0.10 (0.059 ± 0.004)	12.00 + 0.30 / - 0.10 (0.472 + 0.012 / - 0.004)	4.00 ± 0.10 (0.157 ± 0.004)	0.29 ± 0.013 (0.011 ± 0.0005)	13"



Reel Specifications	
A	330.0 / 178.0 ± 2.0 (13.00 / 7.00 ± 0.078)
B	95.0 ± 1.0 (3.74 ± 0.039)
C	13.0 ± 0.5 (0.51 ± 0.020)
D	21.0 ± 0.8 (0.82 ± 0.031)
E	2.0 ± 0.5 (0.08 ± 0.020)
W	8.0 ± 1.0 (0.32 ± 0.039)
T	1.0 (0.039)



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