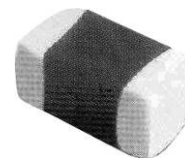


# Multilayer Chip Ferrite Bead – SZ Series

Operating Temp. : -55°C~+125°C



## FEATURES

- Internal silver printed layers and magnetic shielded structures to minimize crosstalk
- It has sharp impedance characteristics at desirable frequency and does not affect the signal frequency
- Three types material and wide range of impedance values for various applications

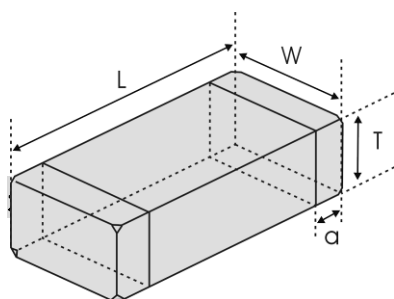
## APPLICATIONS

- Noise suppression for high speed signal of electric equipments such as computers and peripheral devices, DVD cameras, LCD TVs, communication equipments, OA equipments, etc.

## PRODUCT IDENTIFICATION

<u>SZ</u> ①	<u>1608</u> ②	<u>G</u> ③	<u>121</u> ④	<u>T</u> ⑤	<u>F</u> ⑥																									
①	②	③	④	⑤	⑥																									
<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">Type</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">SZ</td> <td>Chip Ferrite Bead For High Speed</td> </tr> </tbody> </table>	Type		SZ	Chip Ferrite Bead For High Speed	<table border="1" style="width: 100%;"> <thead> <tr> <th colspan="2">External Dimensions (L×W) (mm)</th> </tr> </thead> <tbody> <tr> <td>0603 [0201]</td> <td>0.6×0.3</td> </tr> <tr> <td>1005 [0402]</td> <td>1.0×0.5</td> </tr> <tr> <td>1608 [0603]</td> <td>1.6×0.8</td> </tr> <tr> <td>2012 [0805]</td> <td>2.0×1.25</td> </tr> </tbody> </table>	External Dimensions (L×W) (mm)		0603 [0201]	0.6×0.3	1005 [0402]	1.0×0.5	1608 [0603]	1.6×0.8	2012 [0805]	2.0×1.25	<table border="1" style="width: 100%;"> <thead> <tr> <th>Material Code</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">F, G, K</td> </tr> </tbody> </table>	Material Code	F, G, K	<table border="1" style="width: 100%;"> <thead> <tr> <th>Nominal Impedance</th> </tr> </thead> <tbody> <tr> <td>Example      Nominal Value</td> </tr> <tr> <td>300              30Ω</td> </tr> <tr> <td>121              120Ω</td> </tr> <tr> <td>102              1000Ω</td> </tr> </tbody> </table>	Nominal Impedance	Example      Nominal Value	300              30Ω	121              120Ω	102              1000Ω	<table border="1" style="width: 100%;"> <thead> <tr> <th>Packing</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">T              Tape &amp; Reel</td> </tr> </tbody> </table>	Packing	T              Tape & Reel	<table border="1" style="width: 100%;"> <thead> <tr> <th>Hazardous Substance Free Products</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">F</td> </tr> </tbody> </table>	Hazardous Substance Free Products	F
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Packing																														
T              Tape & Reel																														
Hazardous Substance Free Products																														
F																														

## SHAPE AND DIMENSIONS



Unit: mm [inch]

Type	L	W	T	a
SZ0603 [0201]	0.6±0.05 [.024±.002]	0.3±0.05 [.012±.002]	0.3±0.05 [.012±.002]	0.15±0.05 [.006±.002]
SZ1005 [0402]	1.0±0.15 [.039±.006]	0.5±0.15 [.020±.006]	0.5±0.15 [.020±.006]	0.25±0.1 [.010±.004]
SZ1608 [0603]	1.6±0.15 [.063±.006]	0.8±0.15 [.031±.006]	0.8±0.15 [.031±.006]	0.3±0.2 [.012±.008]
SZ2012 [0805]	2.0 (+0.3, -0.1) [.079 (+.012, -.004)]	1.25±0.2 [.049±.008]	0.85±0.2 [.033±.008]	0.5±0.3 [.020±.012]

## SPECIFICATIONS

### SZ0603 TYPE

Part Number	Impedance	Z Test Frequency	Max. DC Resistance	Max. Rated Current	Thickness
Units	$\Omega$	MHz	$\Omega$	mA	mm [inch]
Symbol	Z	Freq.	DCR	I <sub>r</sub>	T
SZ0603G100TF	10±25%	100	0.25	200	0.3±0.05 [.012±.002]
SZ0603G220TF	22±25%	100	0.45	200	
SZ0603G330TF	33±25%	100	0.55	150	
SZ0603G470TF	47±25%	100	0.70	150	
SZ0603G560TF	56±25%	100	1.00	100	

### SZ1005 TYPE

Part Number	Impedance	Z Test Frequency	Max. DC Resistance	Max. Rated Current	Thickness
Units	$\Omega$	MHz	$\Omega$	mA	mm [inch]
Symbol	Z	Freq.	DCR	I <sub>r</sub>	T
SZ1005F050TF	0~10	100	0.10	300	0.5±0.15 [.020±.006]
SZ1005F100TF	5~15	100	0.20	300	
SZ1005F330TF	33±25%	100	0.40	300	
SZ1005F470TF	47±25%	100	0.60	200	
SZ1005F560TF	56±25%	100	0.80	200	
SZ1005G050TF	0~15	100	0.15	600	
SZ1005G300TF	30±25%	100	0.15	600	
SZ1005G750TF	75±25%	100	0.30	600	
SZ1005G121TF	120±25%	100	0.40	400	
SZ1005G221TF	220±25%	100	0.70	200	
SZ1005K750TF	75±25%	100	0.30	600	
SZ1005K121TF	120±25%	100	0.40	400	
SZ1005K221TF	220±25%	100	0.70	200	
SZ1005K301TF	300±25%	100	0.80	200	
SZ1005K421TF	420±25%	100	1.00	150	
SZ1005K601TF	600±25%	100	1.10	100	
SZ1005K102TF	1000±25%	100	1.20	100	
SZ1005K152TF	1500±25%	100	1.40	100	
SZ1005K182TF	1800±25%	100	1.80	50	

### SZ1608 TYPE

Part Number	Impedance	Z Test Frequency	Max. DC Resistance	Max. Rated Current	Thickness
Units	$\Omega$	MHz	$\Omega$	mA	mm [inch]
Symbol	Z	Freq.	DCR	I <sub>r</sub>	T
SZ1608F050TF	0~10	100	0.20	500	0.8±0.15 [.031±.006]
SZ1608F100TF	5~15	100	0.25	500	
SZ1608F220TF	22±25%	100	0.35	500	
SZ1608F470TF	47±25%	100	0.55	300	
SZ1608F750TF	75±25%	100	0.70	300	
SZ1608F121TF	120±25%	100	0.90	200	
SZ1608G050TF	0~15	100	0.10	800	
SZ1608G220TF	22±25%	100	0.20	800	
SZ1608G600TF	60±25%	100	0.30	600	
SZ1608G121TF	120±25%	100	0.45	600	
SZ1608G221TF	220±25%	100	0.55	500	
SZ1608G331TF	330±25%	100	0.70	500	
SZ1608G471TF	470±25%	100	0.80	400	
SZ1608G601TF	600±25%	100	1.10	200	
SZ1608G102TF	1000±25%	100	1.20	150	
SZ1608K121TF	120±25%	100	0.40	600	

## SPECIFICATIONS

### SZ1608 TYPE

Part Number	Impedance	Z Test Frequency	Max. DC Resistance	Max. Rated Current	Thickness
Units	$\Omega$	MHz	$\Omega$	mA	mm [inch]
Symbol	Z	Freq.	DCR	I <sub>r</sub>	T
SZ1608K221TF	220±25%	100	0.45	500	0.8±0.15 [.031±.006]
SZ1608K331TF	330±25%	100	0.50	500	
SZ1608K421TF	420±25%	100	0.55	400	
SZ1608K471TF	470±25%	100	0.55	400	
SZ1608K601TF	600±25%	100	0.60	200	
SZ1608K102TF	1000±25%	100	0.80	200	
SZ1608K152TF	1500±25%	100	0.80	200	
SZ1608K202TF	2000±25%	100	1.00	200	
SZ1608K222TF	2200±25%	100	1.00	200	
SZ1608K252TF	2500±25%	100	1.20	200	
SZ1608K272TF	2700±25%	100	1.40	200	

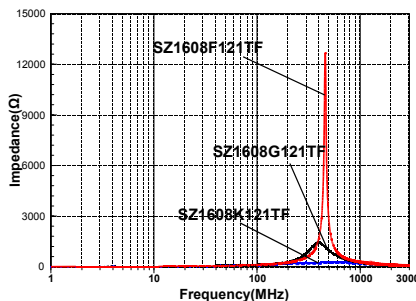
### SZ2012 TYPE

Part Number	Impedance	Z Test Frequency	Max. DC Resistance	Max. Rated Current	Thickness
Units	$\Omega$	MHz	$\Omega$	mA	mm [inch]
Symbol	Z	Freq.	DCR	I <sub>r</sub>	T
SZ2012G050TF	0~15	100	0.07	1000	0.85±0.2 [.033±.008]
SZ2012G300TF	30±25%	100	0.10	1000	
SZ2012G600TF	60±25%	100	0.20	800	
SZ2012G121TF	120±25%	100	0.25	600	
SZ2012G221TF	220±25%	100	0.30	600	
SZ2012G421TF	420±25%	100	0.40	600	
SZ2012G601TF	600±25%	100	0.45	600	
SZ2012G102TF	1000±25%	100	0.50	500	
SZ2012K121TF	120±25%	100	0.20	600	
SZ2012K221TF	220±25%	100	0.25	600	
SZ2012K301TF	300±25%	100	0.30	600	
SZ2012K601TF	600±25%	100	0.35	600	
SZ2012K102TF	1000±25%	100	0.40	500	
SZ2012K152TF	1500±25%	100	0.45	200	
SZ2012K222TF	2200±25%	100	0.60	200	
SZ2012K252TF	2500±25%	100	0.70	200	
SZ2012K272TF	2700±25%	100	0.80	200	

※: Products with other electrical characteristics can be provided upon customer's request. Please contact your local sales.

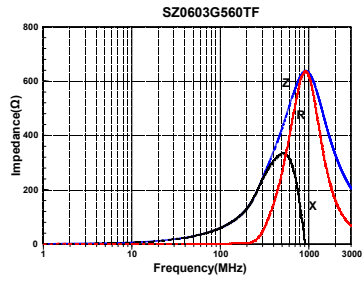
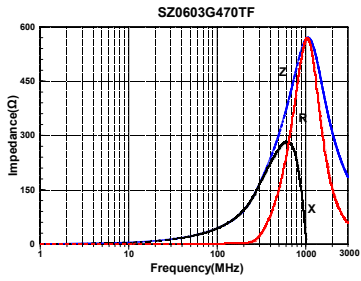
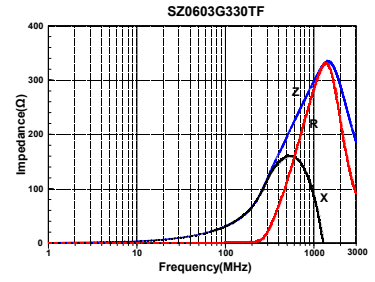
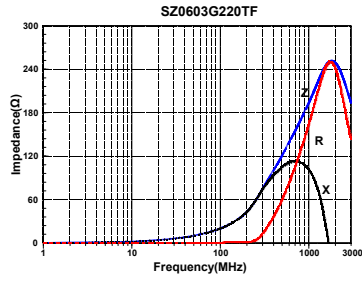
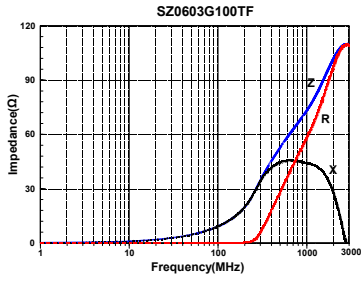
## TYPICAL ELECTRICAL CHARACTERISTICS

### F, G, K Material Comparison

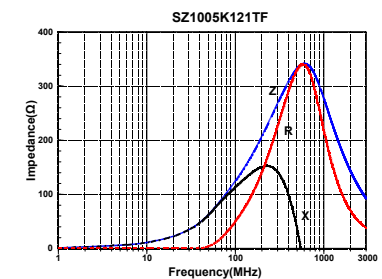
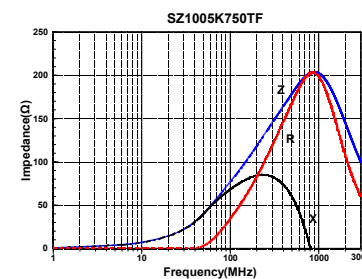
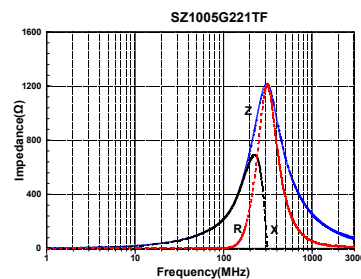
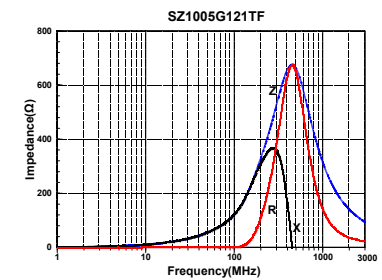
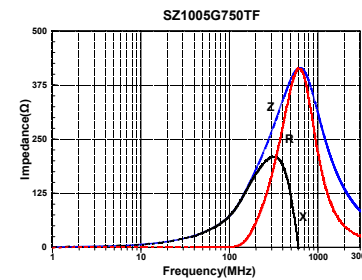
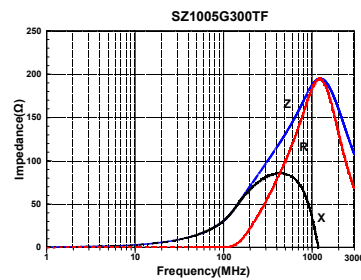
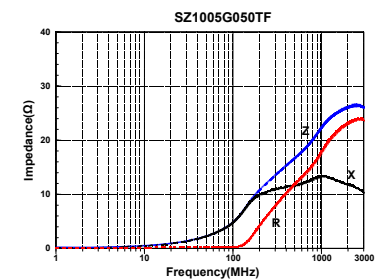
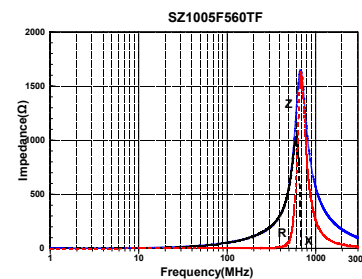
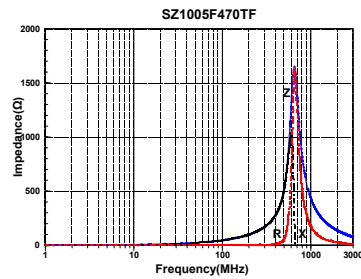
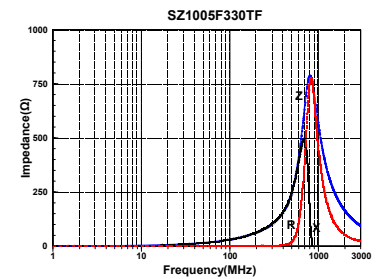
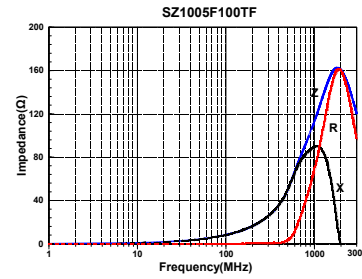
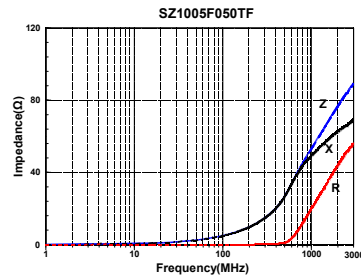


# DETAIL ELECTRICAL CHARACTERISTICS

## SZ0603 TYPE

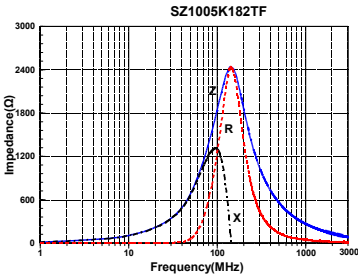
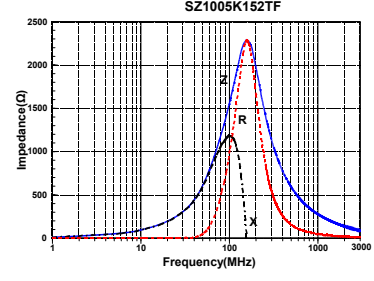
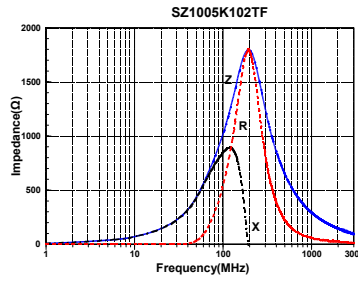
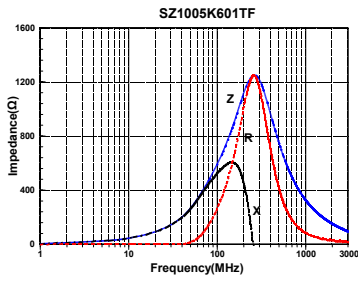
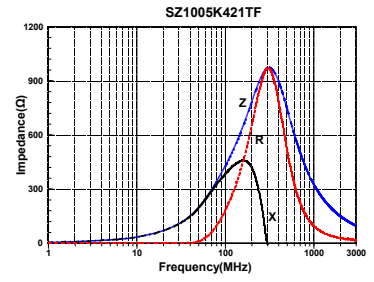
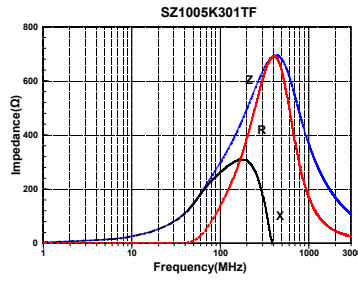
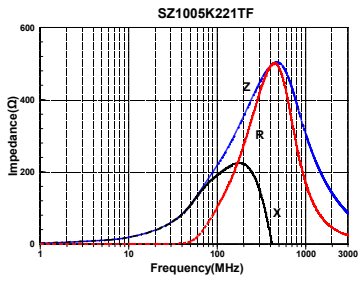


## SZ1005 TYPE

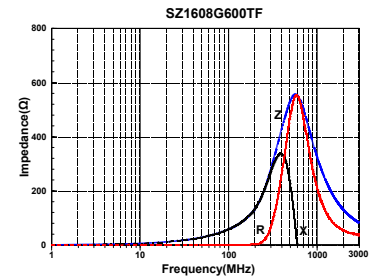
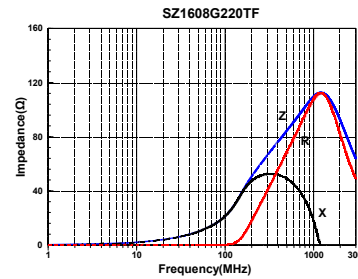
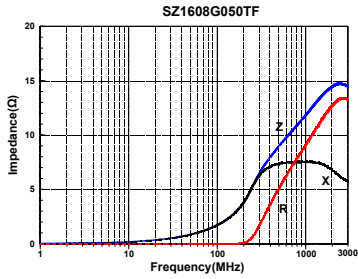
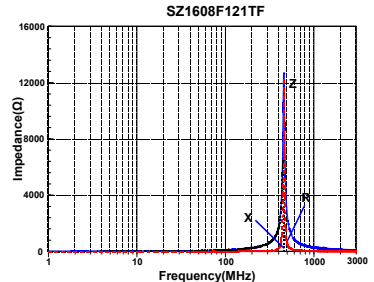
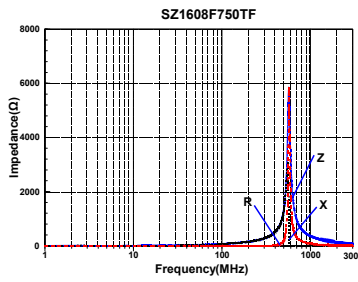
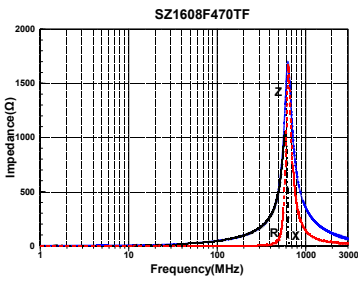
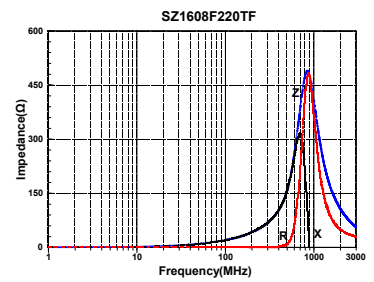
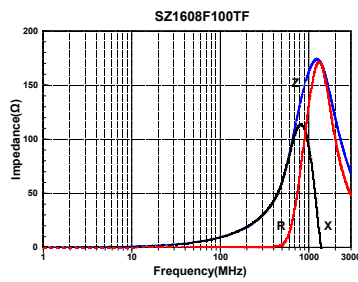
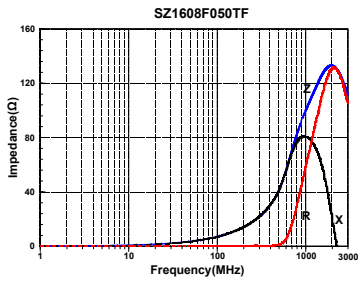


# DETAIL ELECTRICAL CHARACTERISTICS

## SZ1005 TYPE

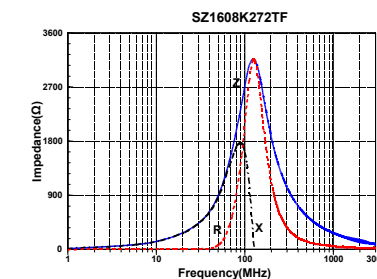
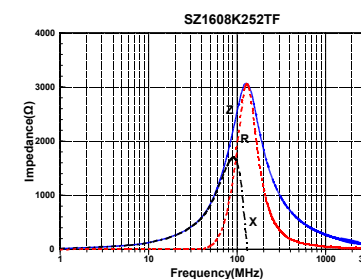
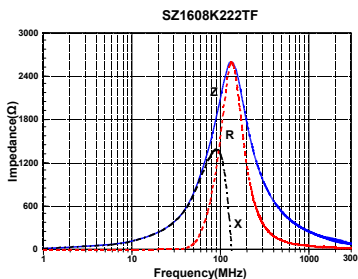
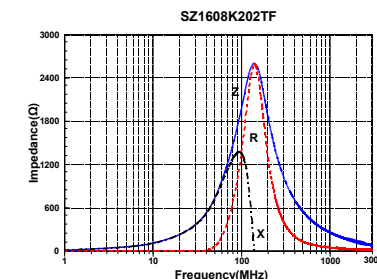
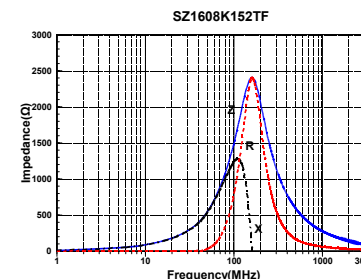
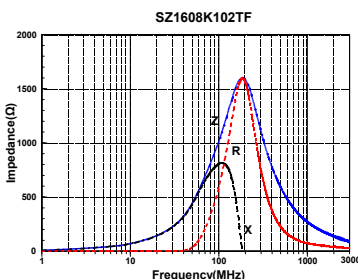
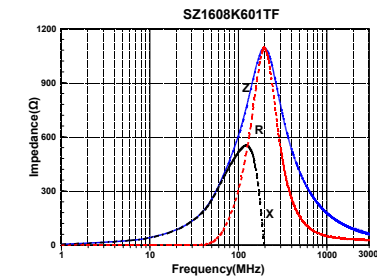
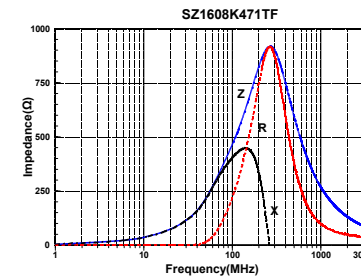
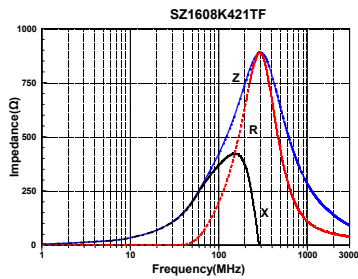
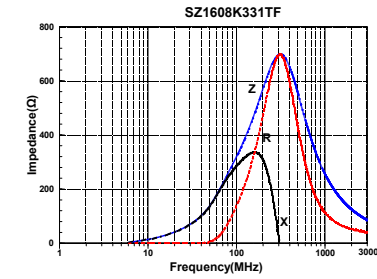
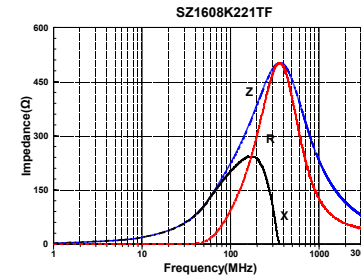
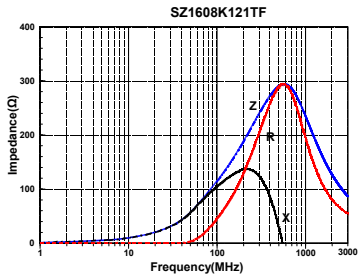
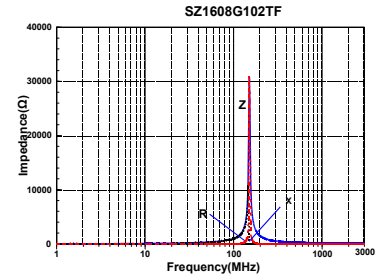
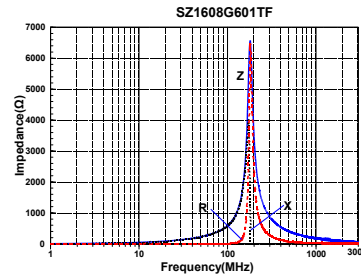
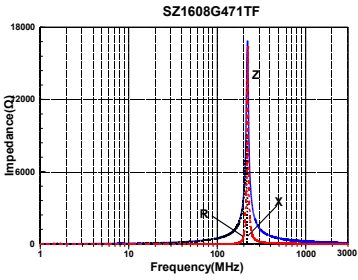
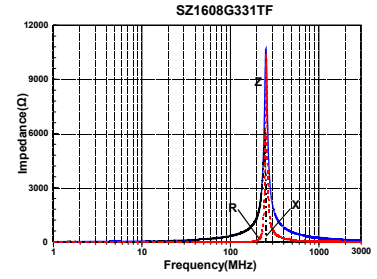
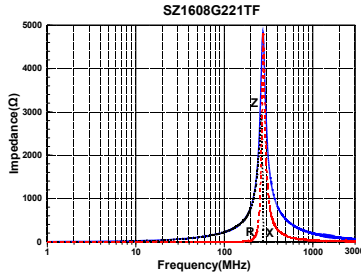
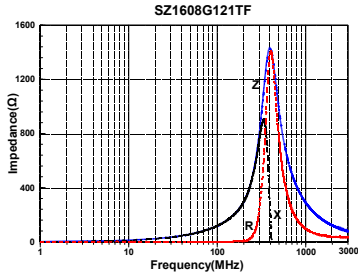


## SZ1608 TYPE



# DETAIL ELECTRICAL CHARACTERISTICS

## SZ1608 TYPE



# DETAIL ELECTRICAL CHARACTERISTICS

## SZ2012 TYPE

