



## Features

- High resistance to heat and humidity
- Resistance to mechanical shock and pressure
- Accurate dimensions for automatic surface mounting
- Wide impedance range
- RoHS compliant\*

## Applications

- Power supply lines
- IC power lines
- Signal lines

# MG, MU, MZ Series High Impedance Chip Ferrite Beads

### Electrical Specifications

Model Number	Impedance ( $\Omega$ ) at 100 MHz	RDC ( $\Omega$ ) Max.	IDC (mA) Max.
MG2029-100Y	10 $\pm$ 25 %	0.20	400
MG2029-300Y	30 $\pm$ 25 %	0.10	400
MG2029-400Y	40 $\pm$ 25 %	0.20	300
MU2029-600Y	60 $\pm$ 25 %	0.10	900
MG2029-800Y	80 $\pm$ 25 %	0.20	300
MG2029-101Y	100 $\pm$ 25 %	0.20	400
MG2029-121Y	120 $\pm$ 25 %	0.25	300
MU2029-151Y	150 $\pm$ 25 %	0.20	800
MU2029-221Y	220 $\pm$ 25 %	0.30	500
MU2029-301Y	300 $\pm$ 25 %	0.30	500
MU2029-471Y	470 $\pm$ 25 %	0.35	700
MZ2029-601Y	600 $\pm$ 25 %	0.40	100
MZ2029-601T	600 $\pm$ 25 %	0.40	200
MG1608-300Y	30 $\pm$ 25 %	0.20	200
MG1608-400Y	40 $\pm$ 25 %	0.30	300
MU1608-600Y	60 $\pm$ 25 %	0.20	700
MG1608-800Y	80 $\pm$ 25 %	0.30	300
MG1608-101Y	100 $\pm$ 25 %	0.25	200
MG1608-121Y	120 $\pm$ 25 %	0.30	200
MU1608-151Y	150 $\pm$ 25 %	0.25	600
MU1608-221Y	220 $\pm$ 25 %	0.30	200
MU1608-301Y	300 $\pm$ 25 %	0.35	150
MU1608-471Y	470 $\pm$ 25 %	0.45	350
MZ1608-601Y	600 $\pm$ 25 %	0.45	100
MZ1608-102Y	1000 $\pm$ 25 %	0.60	100
MU1005-100Y	10 $\pm$ 25 %	0.10	500
MU1005-300Y	30 $\pm$ 25 %	0.20	300
MU1005-600Y	60 $\pm$ 25 %	0.25	300
MU1005-121Y	120 $\pm$ 25 %	0.30	100
MU1005-151Y	150 $\pm$ 25 %	0.30	100
MU1005-221Y	220 $\pm$ 25 %	0.40	100
MU1005-241Y	240 $\pm$ 25 %	0.60	100
MU1005-301Y	300 $\pm$ 25 %	0.50	100
MU1005-471Y	470 $\pm$ 25 %	0.65	100
MU1005-601Y	600 $\pm$ 25 %	0.80	80
MU1005-102Y	1000 $\pm$ 25 %	1.20	80

### General Specifications

Operating Temperature .....-55 °C to +125 °C  
 Storage Temperature .....-55 °C to +125 °C  
 Storage Condition .....+40 °C max. at 70 % RH  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Resistance to Soldering Heat ..... +260 °C, 5 seconds  
 Rated Current.....Based on max .....temperature rise of +40 °C  
 Terminal Strength  
 (Force "F" applied for 30 seconds)  
 2029 Series ..... 0.6 F (Kg)  
 1608 Series ..... 0.5 F (Kg)

### Materials

Core Material .....Ferrite  
 Internal Conductor .....Ag or Ag/Pd  
 Terminal .....Ag/Ni/Sn

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Specifications are subject to change without notice.

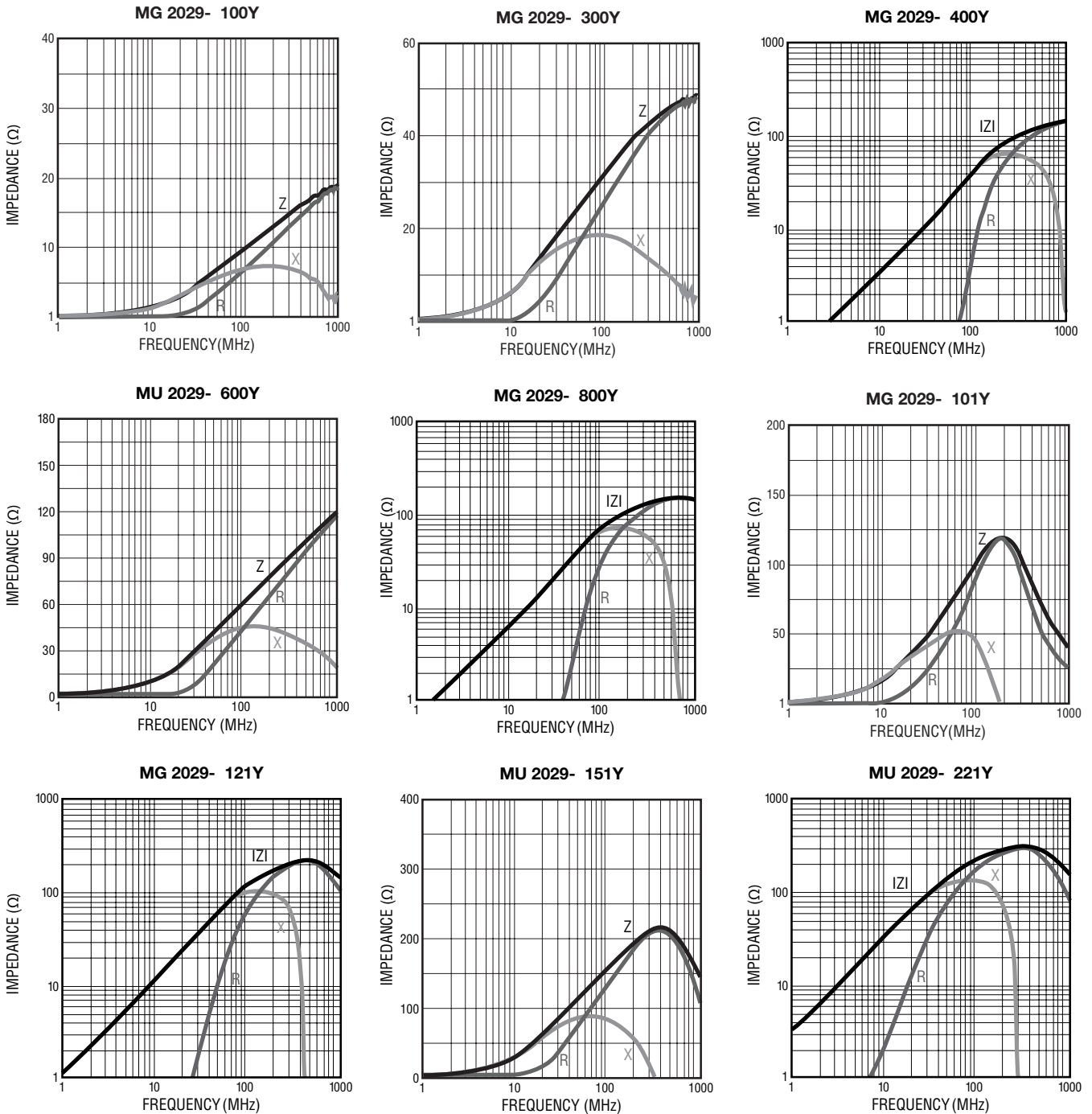
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.

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## Electrical Specifications (continued)



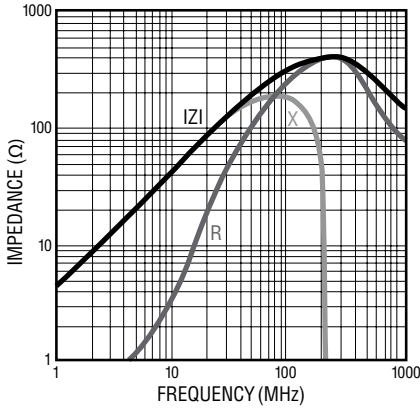
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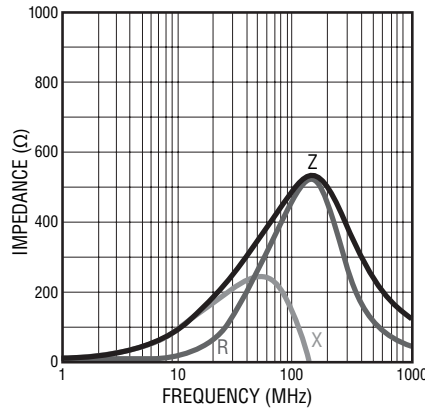
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## Electrical Specifications (continued)

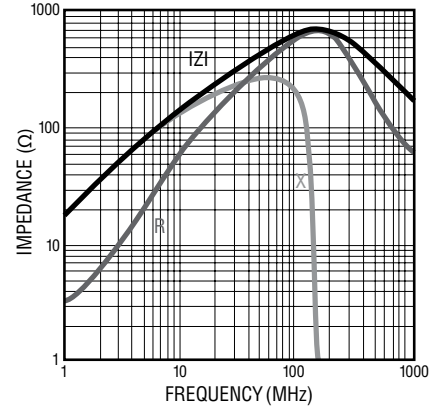
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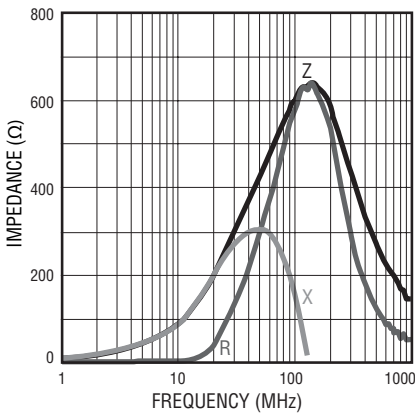
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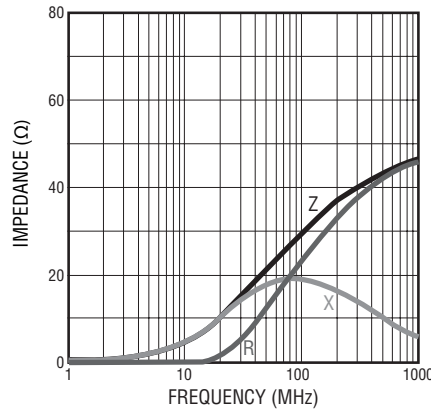
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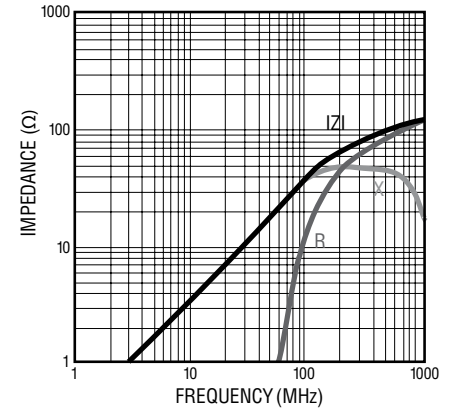
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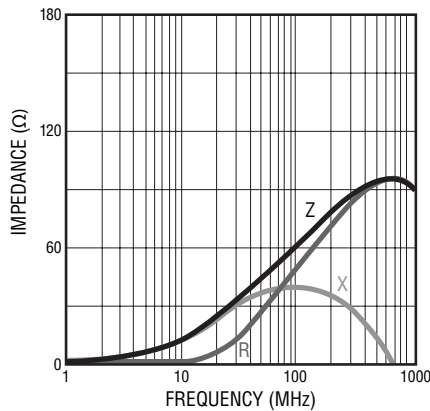
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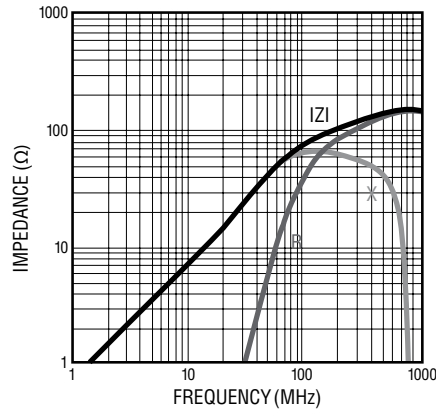
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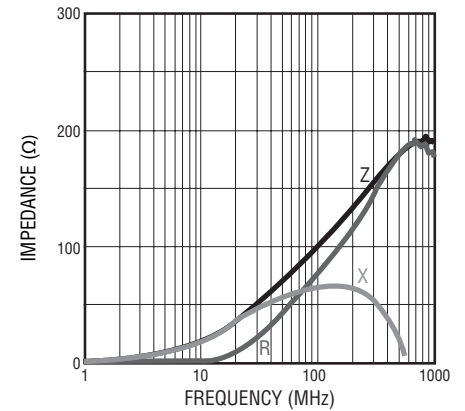
**MU 1608- 600Y**



**MG 1608- 800Y**



**MG 1608- 101Y**



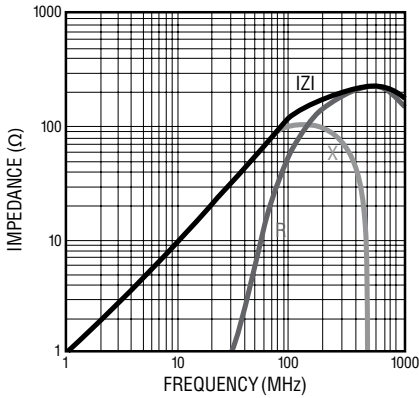
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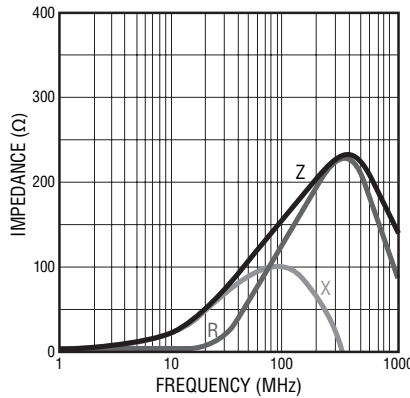
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## Electrical Specifications (continued)

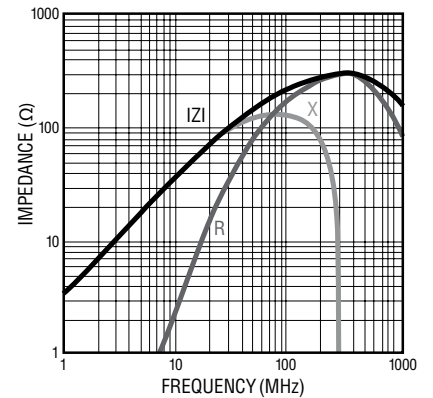
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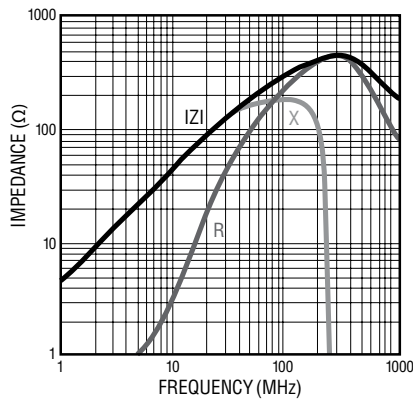
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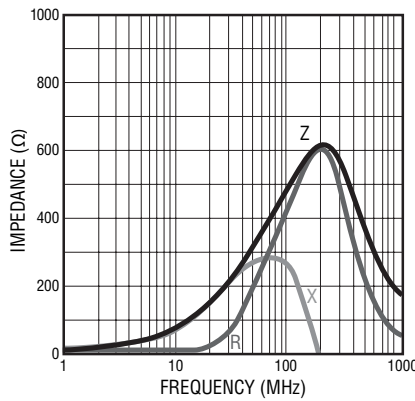
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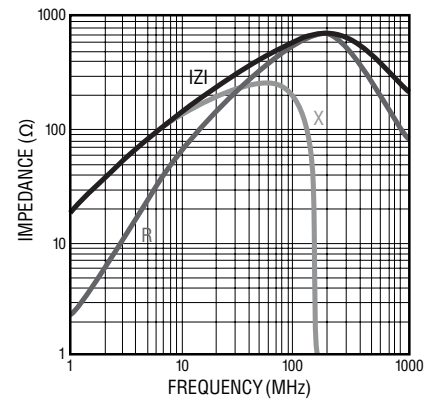
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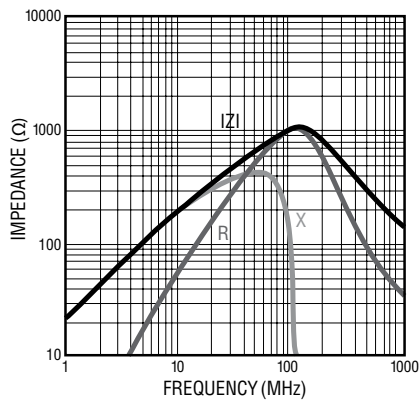
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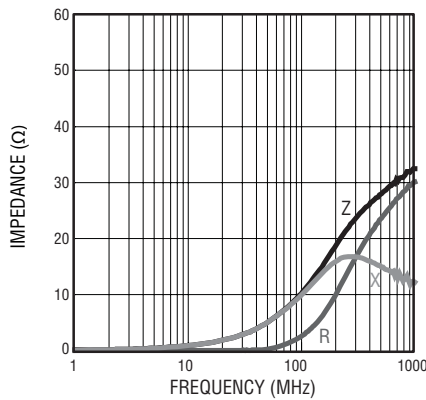
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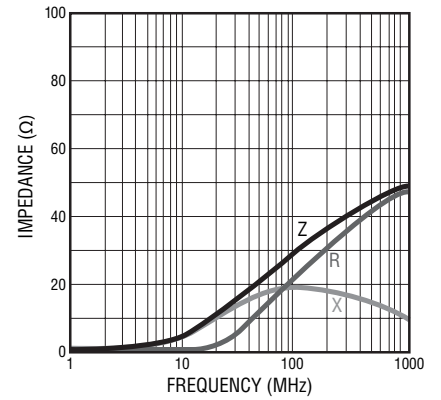
**MZ 1608- 102Y**



**MU 1005- 100Y**



**MU 1005- 300Y**



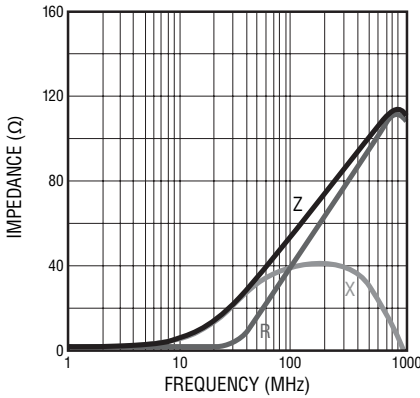
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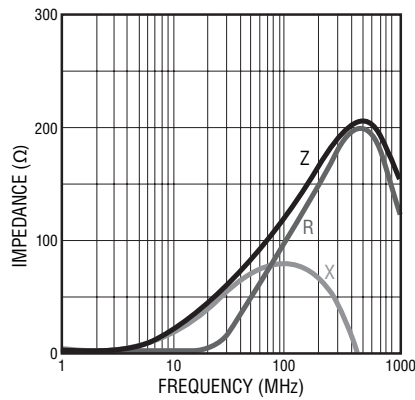
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## Electrical Specifications (continued)

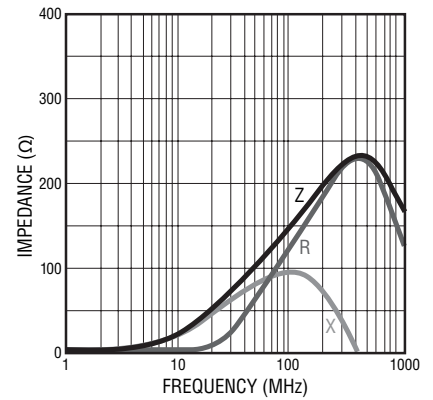
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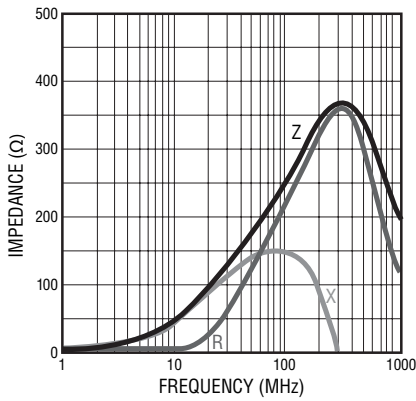
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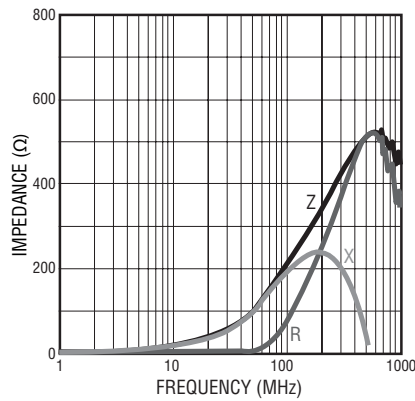
**MU 1005- 151Y**



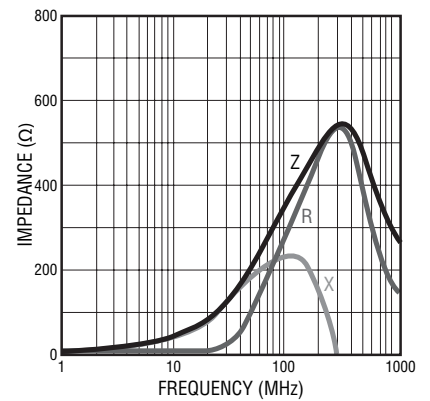
**MU 1005- 221Y**



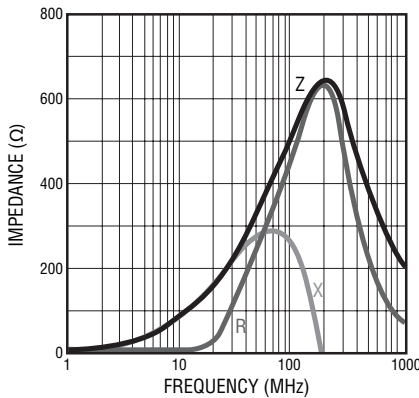
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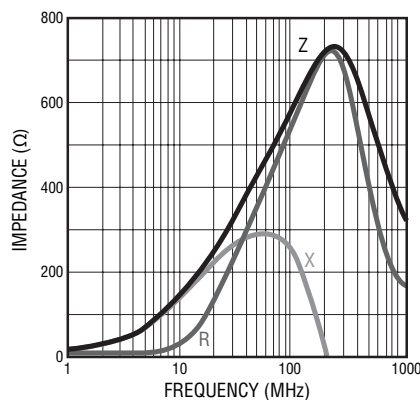
**MU 1005- 301Y**



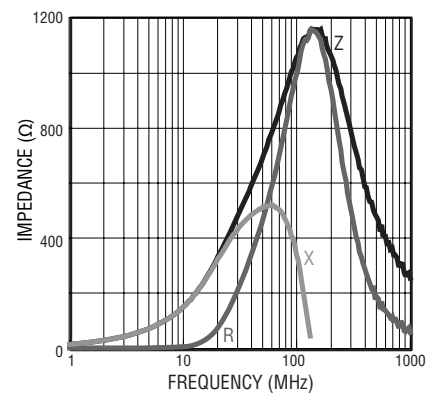
**MU 1005- 471Y**



**MU 1005- 601Y**



**MU 1005- 102Y**



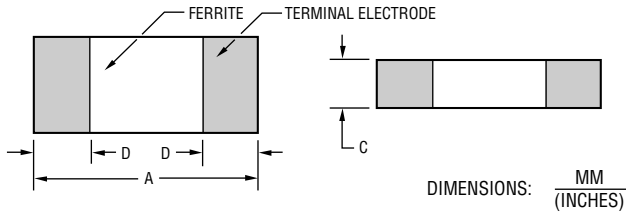
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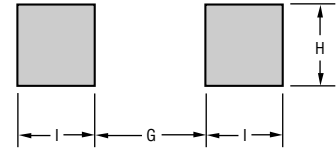
# MG, MU, MZ Series High Impedance Chip Ferrite Beads

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## Product Dimensions

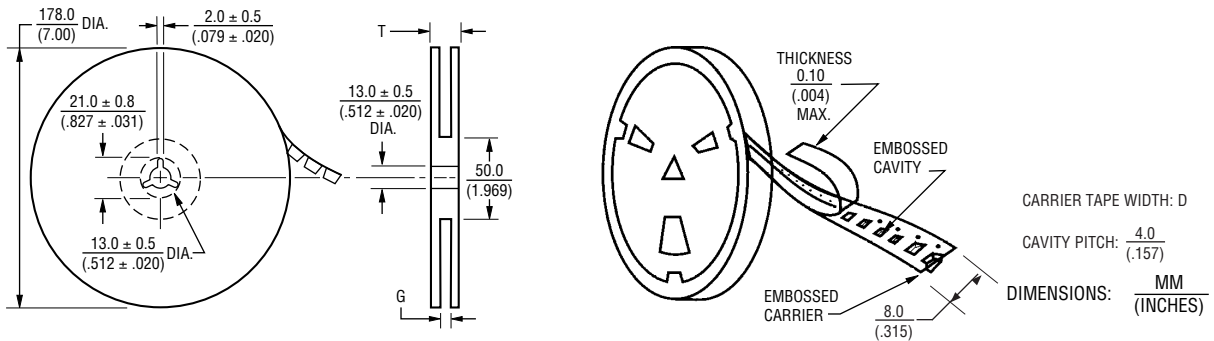


## Recommended Land Pattern



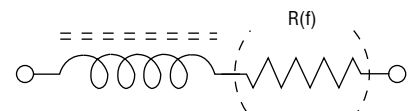
Series	A	B	C	D	G	H	I
2029	$\frac{2.0 \pm 0.2}{(.079 \pm .008)}$	$\frac{1.2 \pm 0.2}{(.047 \pm .008)}$	$\frac{0.9 \pm 0.2}{(.035 \pm .008)}$	$\frac{0.5 \pm 0.2}{(.020 \pm .008)}$	$\frac{1.0}{(.040)}$	$\frac{1.0}{(.040)}$	$\frac{1.0}{(.040)}$
1608	$\frac{1.6 \pm 0.15}{(.063 \pm .006)}$	$\frac{0.8 \pm 0.2}{(.031 \pm .008)}$	$\frac{0.8 \pm 0.2}{(.031 \pm .008)}$	$\frac{0.3 \pm 0.2}{(.012 \pm .008)}$	$\frac{0.7}{(.028)}$	$\frac{0.7}{(.028)}$	$\frac{0.7}{(.028)}$
1005	$\frac{1.0 \pm 0.10}{(.039 \pm .004)}$	$\frac{0.5 \pm 0.1}{(.020 \pm .004)}$	$\frac{0.5 \pm 0.1}{(.020 \pm .004)}$	$\frac{0.25 \pm 0.1}{(.010 \pm .004)}$	$\frac{0.5}{(.020)}$	$\frac{0.55}{(.022)}$	$\frac{0.7}{(.028)}$

## Reel Dimensions

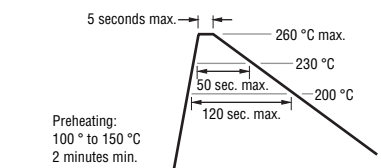


Series	Pcs. per Reel	Gross Weight (g)	D	G	T
2029	4,000	120	$\frac{8.0}{(.315)}$	$\frac{10.0 \pm 0}{(.394 \pm 0)}$	$\frac{12.5}{(.492)}$
1608	4,000	90			
1005	10,000	135			

## Equivalent Circuit



## Recommended Soldering



REV. 04/17

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