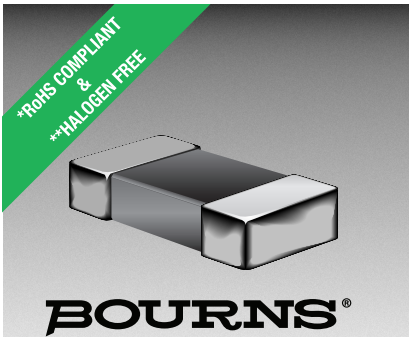




**THE DATASHEET OF  
MG1608-121Y**





## 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 (Ω) at 100 MHz	RDC (Ω) Max.	IDC (mA) Max.
MU3261-300Y	30 ±25 %	0.20	500
MU3261-600Y	60 ±25 %	0.20	400
MU3261-750Y	75 ±25 %	0.20	400
MU3261-101Y	100 ±25 %	0.15	500
MU3261-121Y	120 ±25 %	0.15	900
MU3261-221Y	220 ±25 %	0.35	700
MU3261-301Y	300 ±25 %	0.15	700
MU3261-471Y	470 ±25 %	0.35	400
MU3261-601Y	600 ±25 %	0.30	400
MU3261-801Y	800 ±25 %	0.60	300
MU3261-102Y	1000 ±25 %	0.60	300
MG3261-151Y	150 ±25 %	0.15	900
MG3261-301Y	300 ±25 %	0.15	700
MG2029-100Y	10 ±25 %	0.20	400
MG2029-300Y	30 ±25 %	0.10	400
MG2029-400Y	40 ±25 %	0.20	300
MU2029-600Y	60 ±25 %	0.10	900
MG2029-800Y	80 ±25 %	0.20	300
MG2029-101Y	100 ±25 %	0.20	400
MG2029-121Y	120 ±25 %	0.25	300
MU2029-151Y	150 ±25 %	0.20	800
MU2029-221Y	220 ±25 %	0.30	500
MU2029-301Y	300 ±25 %	0.30	500
MU2029-471Y	470 ±25 %	0.35	700
MZ2029-601Y	600 ±25 %	0.40	100
MZ2029-601T	600 ±25 %	0.40	200
MG1608-300Y	30 ±25 %	0.20	200
MG1608-400Y	40 ±25 %	0.30	300
MU1608-600Y	60 ±25 %	0.20	700
MG1608-800Y	80 ±25 %	0.30	300
MG1608-101Y	100 ±25 %	0.25	200
MG1608-121Y	120 ±25 %	0.30	200
MU1608-151Y	150 ±25 %	0.25	600
MU1608-221Y	220 ±25 %	0.30	200
MU1608-301Y	300 ±25 %	0.35	150
MU1608-471Y	470 ±25 %	0.45	350
MZ1608-601Y	600 ±25 %	0.45	100
MZ1608-102Y	1000 ±25 %	0.60	100
MU1005-100Y	10 ±25 %	0.10	500
MU1005-300Y	30 ±25 %	0.20	300
MU1005-600Y	60 ±25 %	0.25	300
MU1005-121Y	120 ±25 %	0.30	100
MU1005-151Y	150 ±25 %	0.30	100
MU1005-221Y	220 ±25 %	0.40	100
MU1005-241Y	240 ±25 %	0.60	100
MU1005-301Y	300 ±25 %	0.50	100
MU1005-471Y	470 ±25 %	0.65	100
MU1005-601Y	600 ±25 %	0.80	80
MU1005-102Y	1000 ±25 %	1.20	80

### Additional Information

Click these links for more information:



### General Specifications

Operating Temperature .....-55 °C to +125 °C  
 Storage Temperature .....-55 °C to +125 °C  
 Rated Current.....Based on max  
 .....temperature rise of +20 °C

### Materials

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



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**www.bourns.com**



**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 Specifications are subject to change without notice.

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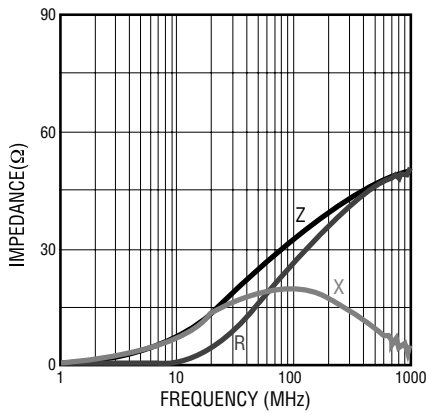
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# MG, MU, MZ Series High Impedance Chip Ferrite Beads

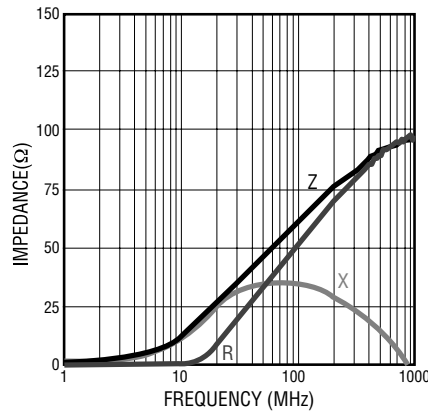
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## Electrical Specifications (continued)

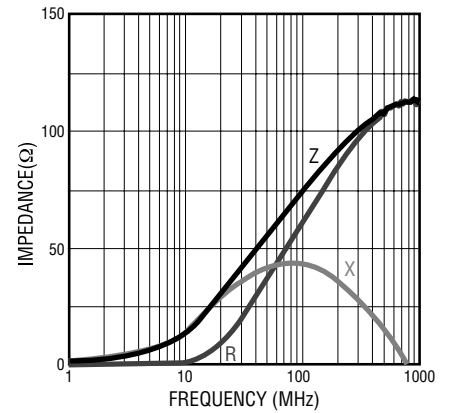
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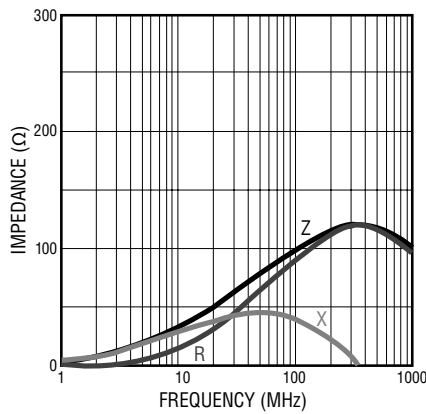
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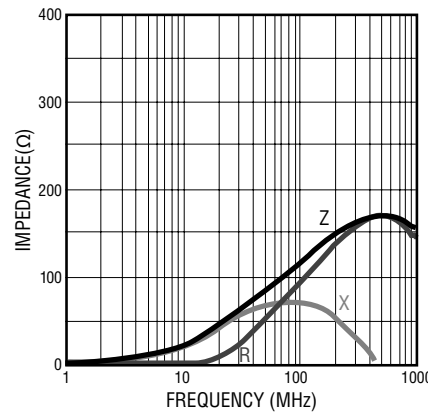
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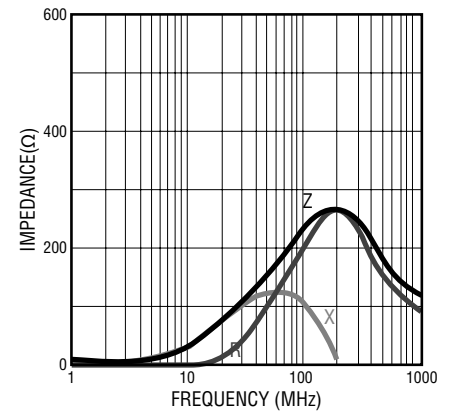
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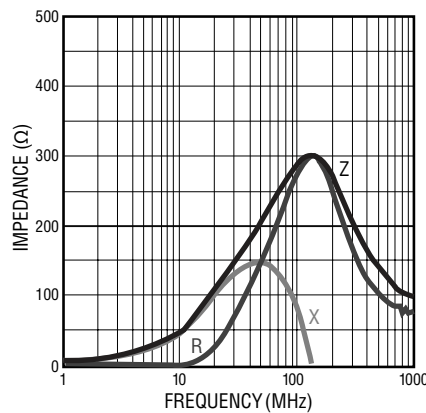
**MU 3261- 121Y**



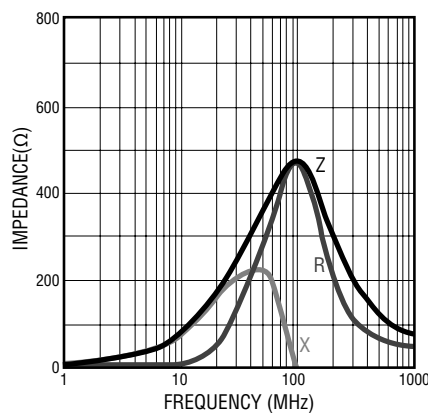
**MU 3261- 221Y**



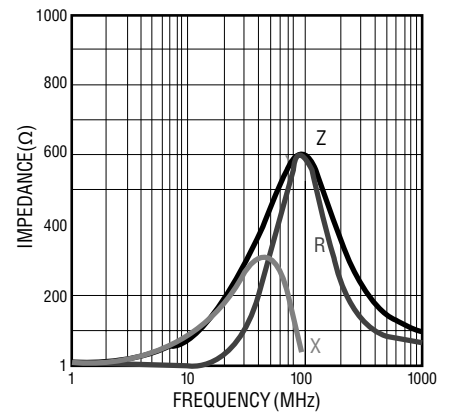
**MU 3261- 301Y**



**MU 3261- 471Y**



**MU 3261- 601Y**



Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

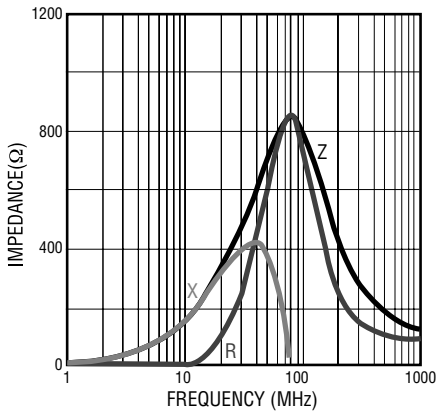
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# MG, MU, MZ Series High Impedance Chip Ferrite Beads

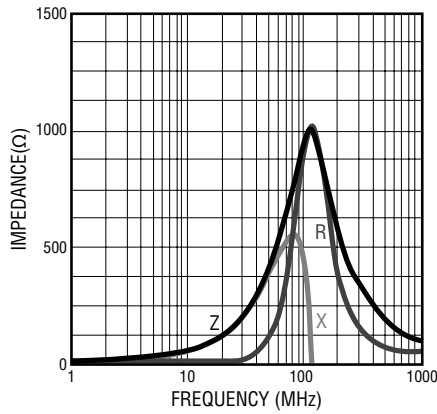
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## Electrical Specifications (continued)

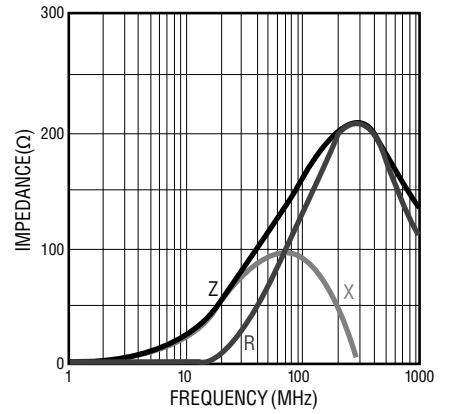
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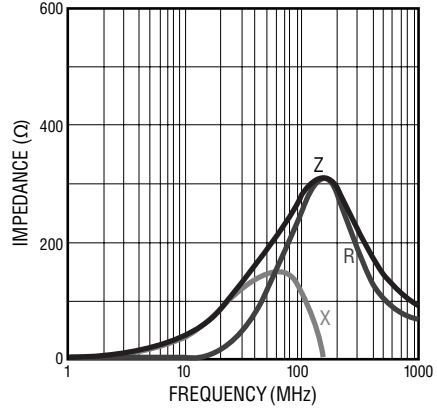
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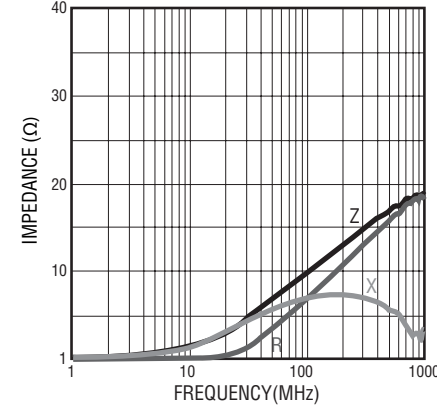
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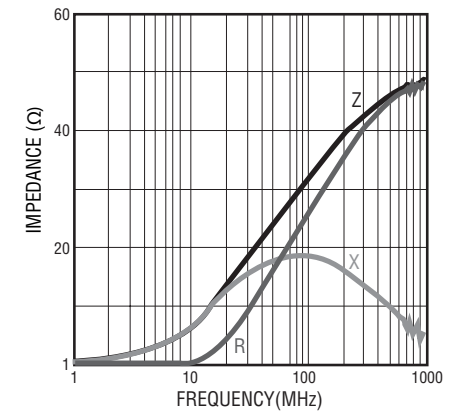
**MG 3261- 301Y**



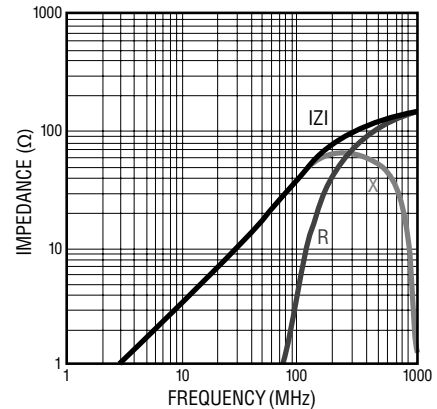
**MG 2029- 100Y**



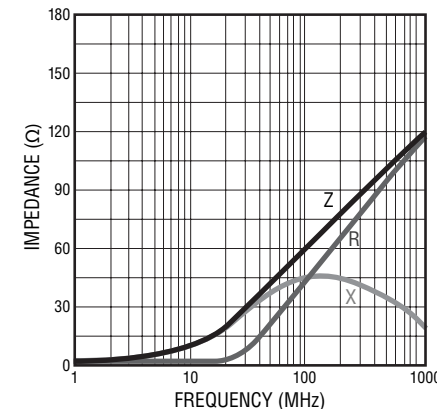
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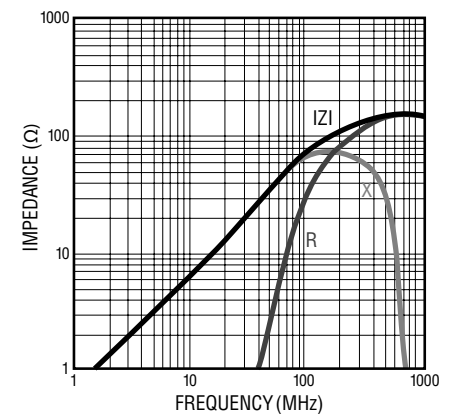
**MG 2029- 400Y**



**MU 2029- 600Y**



**MG 2029- 800Y**



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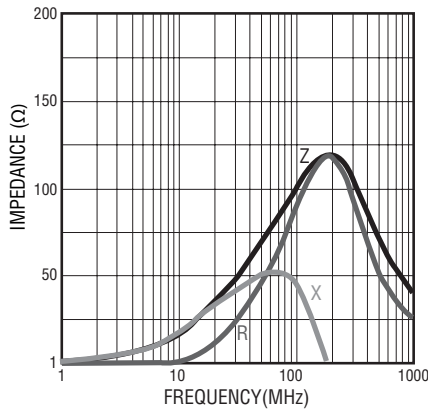
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# MG, MU, MZ Series High Impedance Chip Ferrite Beads

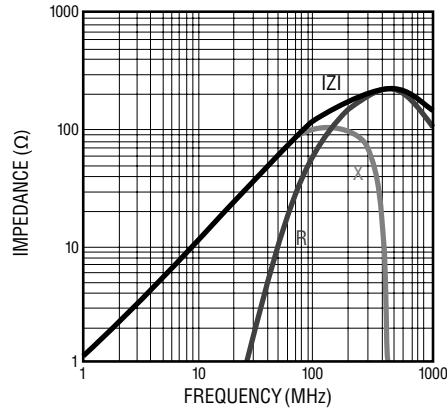
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## Electrical Specifications (continued)

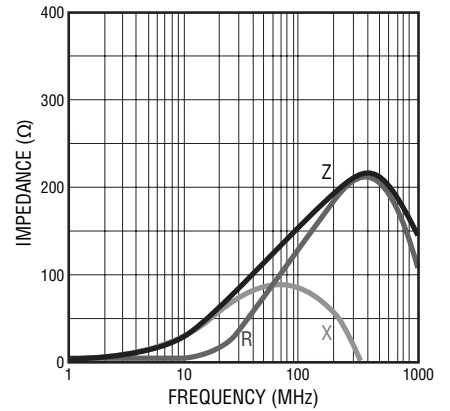
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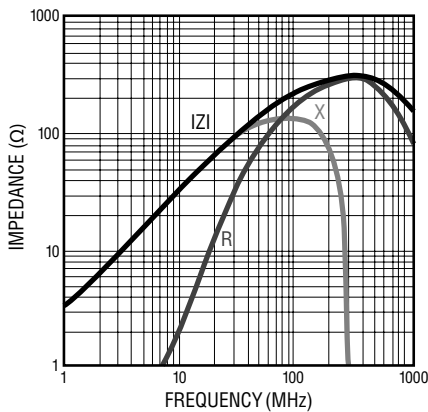
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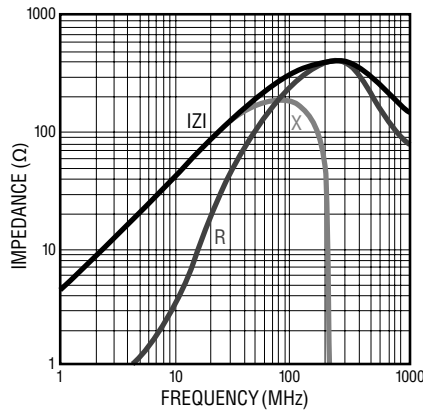
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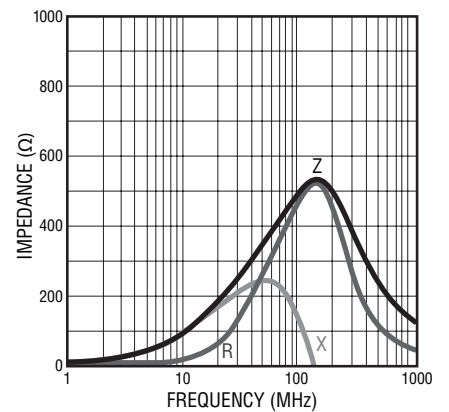
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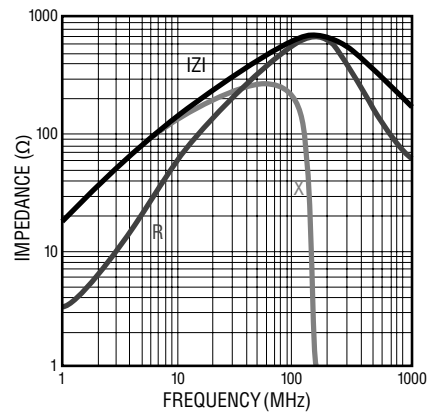
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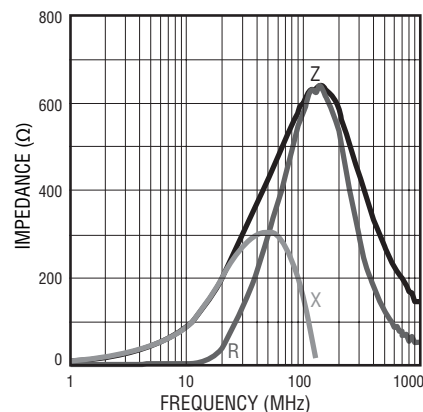
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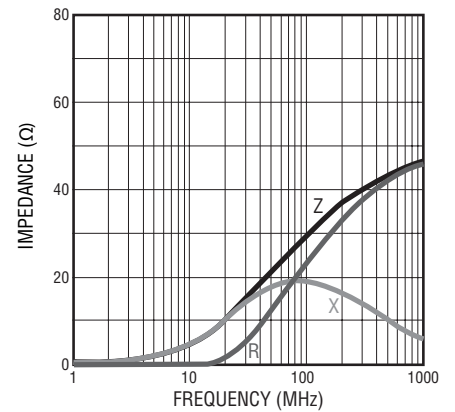
**MZ 2029- 601Y**



**MZ 2029- 601T**



**MU 1608- 300Y**



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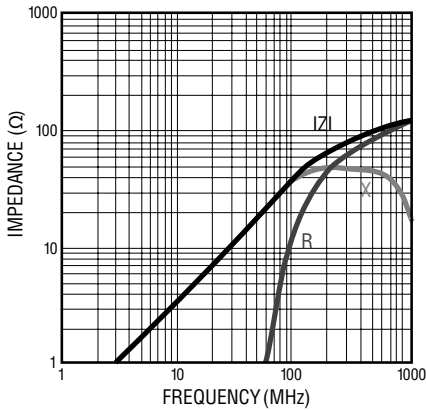
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# MG, MU, MZ Series High Impedance Chip Ferrite Beads

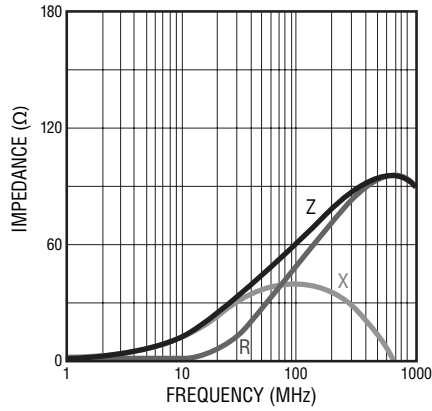
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## Electrical Specifications (continued)

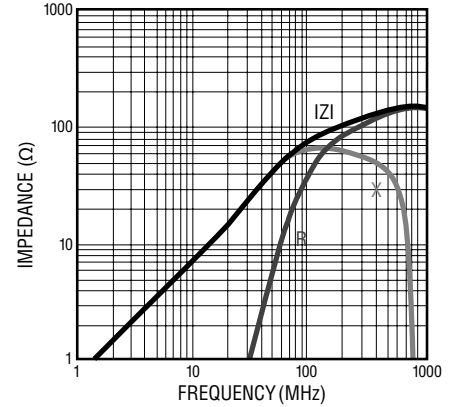
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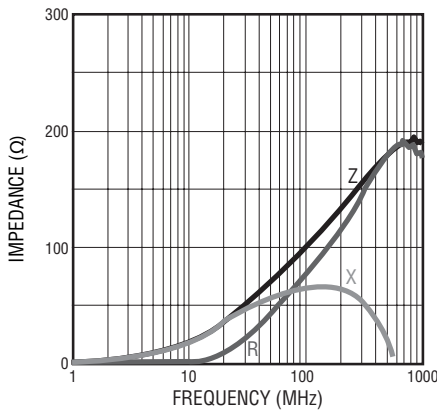
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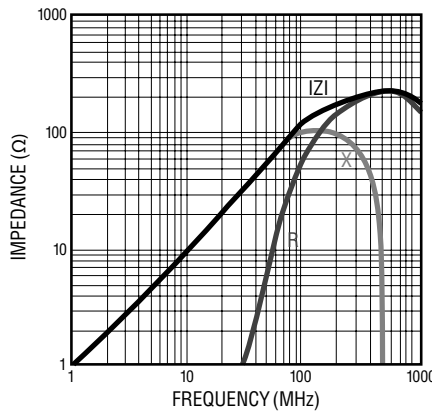
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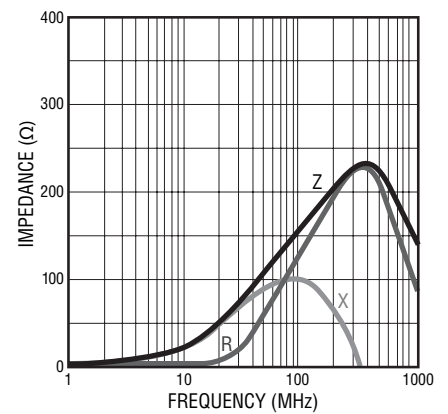
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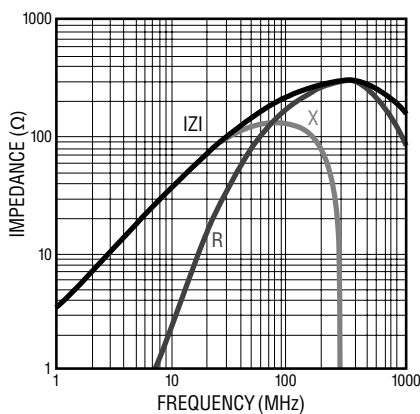
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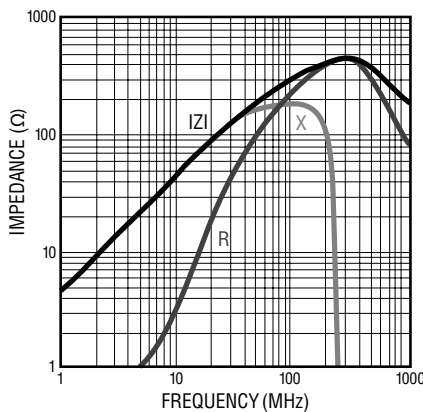
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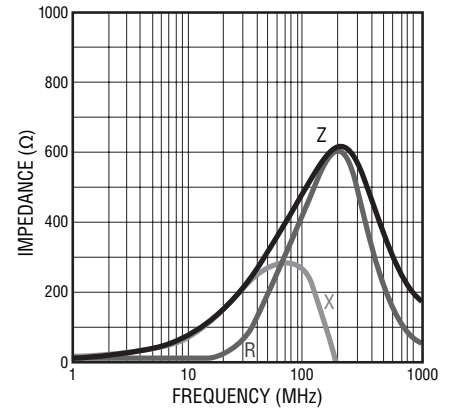
**MU 1608- 221Y**



**MU 1608- 301Y**



**MU 1608- 471Y**



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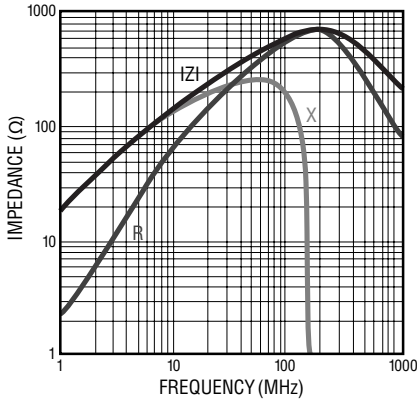
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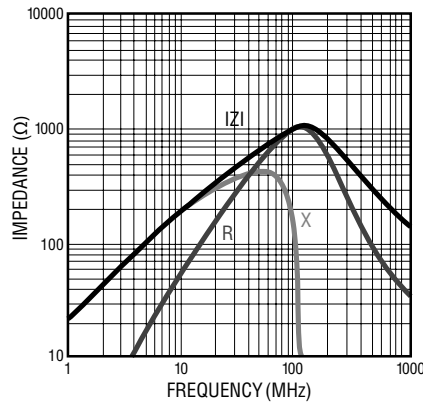
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## Electrical Specifications (continued)

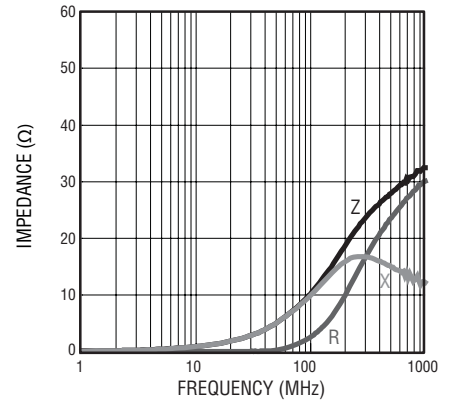
**MZ 1608- 601Y**



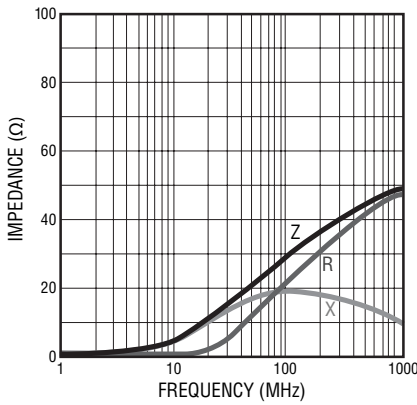
**MZ 1608- 102Y**



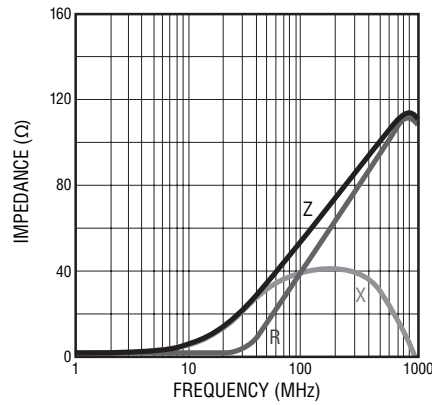
**MU 1005- 100Y**



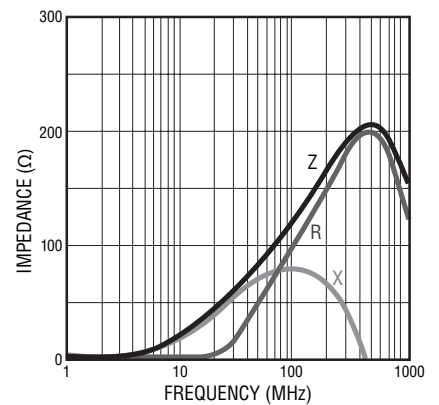
**MU 1005- 300Y**



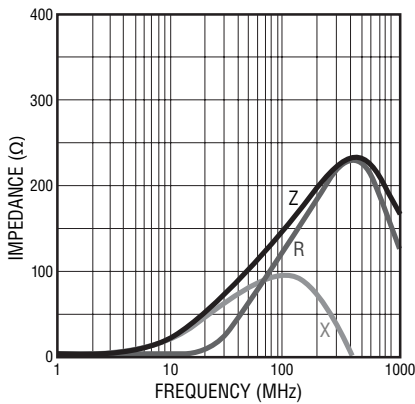
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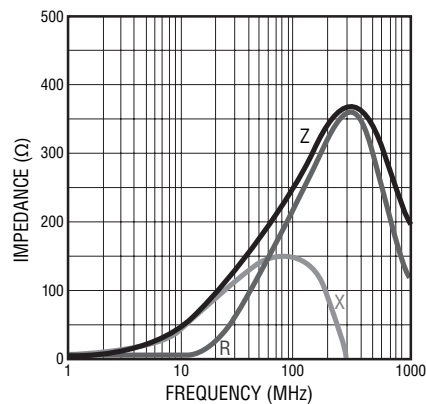
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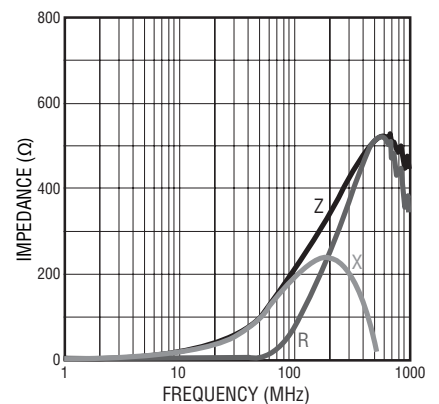
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**MU 1005- 221Y**



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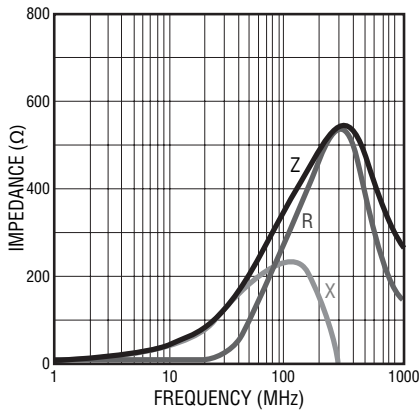


# MG, MU, MZ Series High Impedance Chip Ferrite Beads

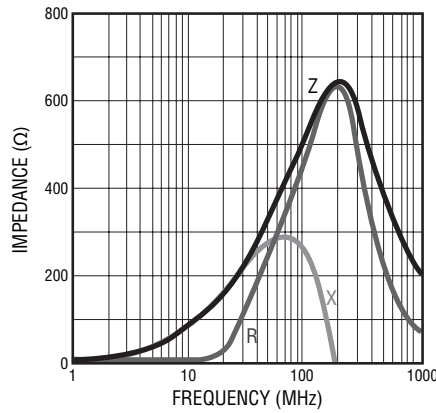
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## Electrical Specifications (continued)

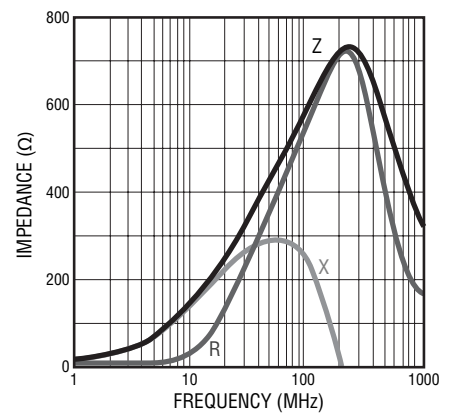
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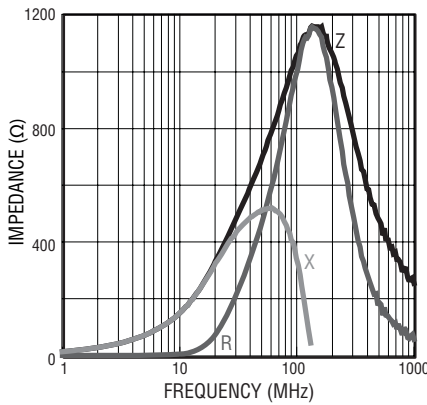
**MU 1005- 471Y**



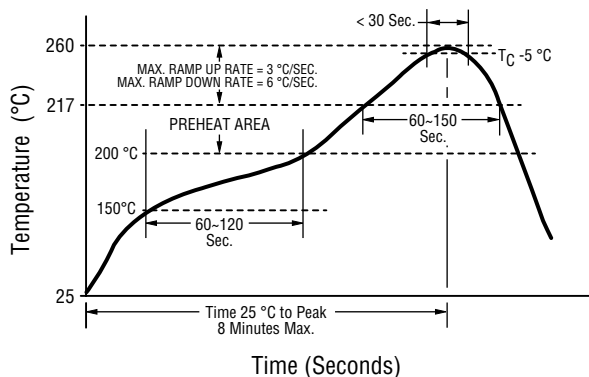
**MU 1005- 601Y**



**MU 1005- 102Y**



## Soldering Profile



REFLOW TIMES: 3 TIMES MAX.

Profile Feature	Pb Free Assembly
Preheat	
- Temperature Min. ( $T_{smin}$ )	150 °C
- Temperature Max. ( $T_{smax}$ )	200 °C
- Time ( $t_s$ ) from $T_{smin}$ to $T_{smax}$	60-120 seconds
Ramp-up Rate ( $T_L$ to $T_P$ )	3 °C/second max.
Liquidous temperature ( $T_L$ )	217 °C
Time ( $t_L$ ) maintained above $T_L$	60-150 seconds
Peak package body temperature ( $T_P$ )	260 °C
Time within 5 °C of Actual Peak Temperature ( $t_p$ )	< 30 seconds
Ramp-Down Rate ( $T_P$ to $T_L$ )	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

Specifications are subject to change without notice.

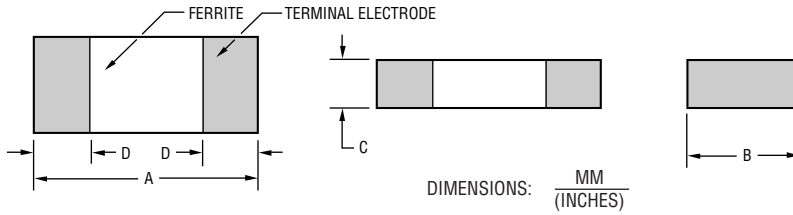
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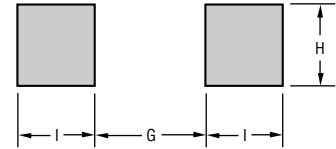
# MG, MU, MZ Series High Impedance Chip Ferrite Beads

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## Product Dimensions

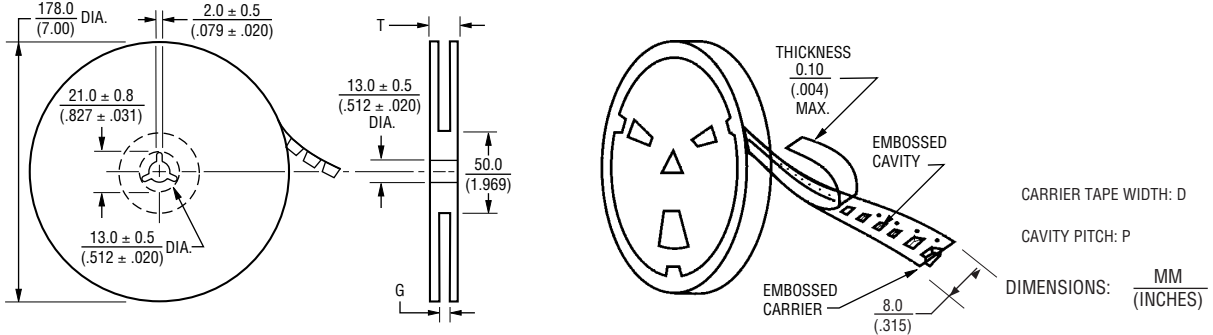


## Recommended Land Pattern



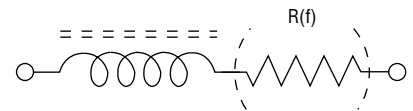
Series	A	B	C	D	G	H	I
3261	$\frac{3.2 \pm 0.2}{(.126 \pm .008)}$	$\frac{1.6 \pm 0.2}{(.063 \pm .008)}$	$\frac{1.1 \pm 0.2}{(.043 \pm .008)}$	$\frac{0.5 \pm 0.2}{(.020 \pm .008)}$	$\frac{2.2}{(.087)}$	$\frac{1.8}{(.071)}$	$\frac{1.05}{(.041)}$
2029	$\frac{2.0 \pm 0.2}{(.079 \pm .008)}$	$\frac{1.2 \pm 0.2}{(.047 \pm .008)}$	$\frac{0.9 \pm 0.2}{(.035 \pm .008)}$	$\frac{0.5 \pm 0.2}{(.020 \pm .008)}$	$\frac{1.0}{(.040)}$	$\frac{1.0}{(.040)}$	$\frac{1.0}{(.040)}$
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	D	P	G	T
3261	3,000	$\frac{8.0}{(.315)}$	$\frac{4.0}{(.157)}$	$\frac{10.0 + 0}{(.394 + 0)}$	$\frac{12.5}{(.492)}$
2029	4,000		$\frac{4.0}{(.157)}$		
1608	4,000		$\frac{4.0}{(.157)}$		
1005	10,000		$\frac{2.0}{(.079)}$		

## Equivalent Circuit



REV. 06/22

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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