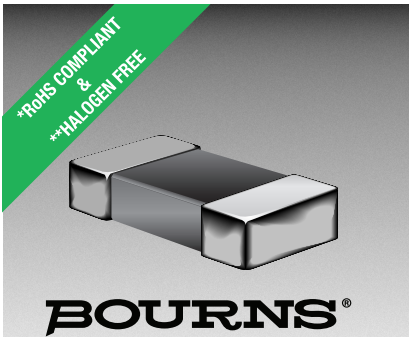




**THE DATASHEET OF  
MU1005-121Y**





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

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
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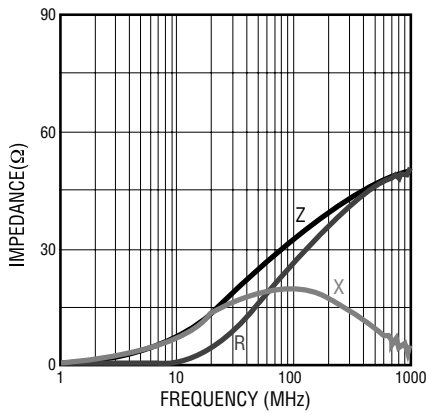
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# MG, MU, MZ Series High Impedance Chip Ferrite Beads

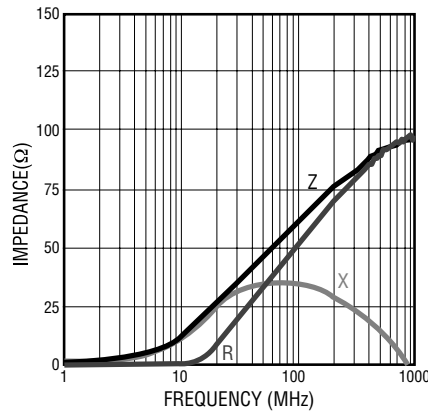
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## Electrical Specifications (continued)

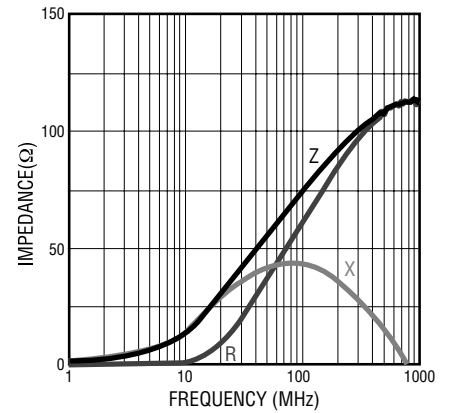
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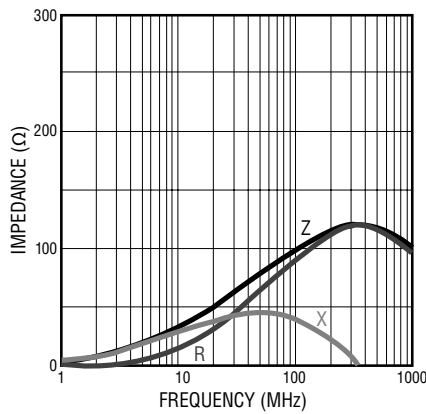
**MU 3261- 600Y**



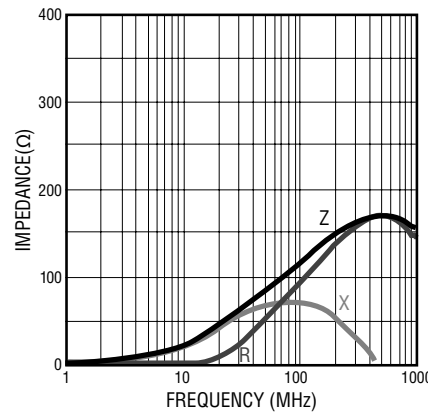
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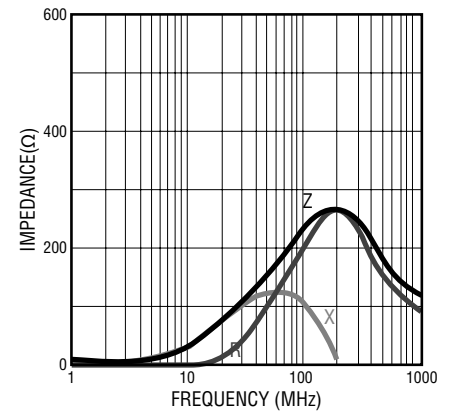
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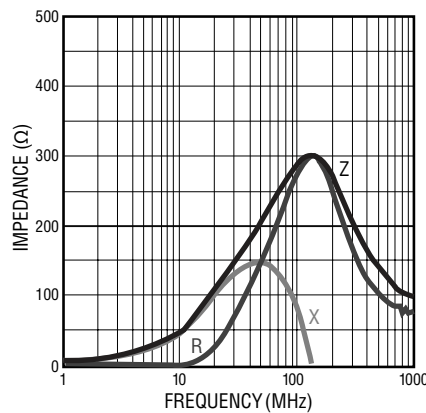
**MU 3261- 121Y**



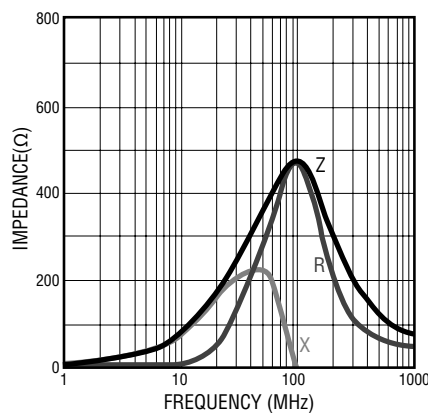
**MU 3261- 221Y**



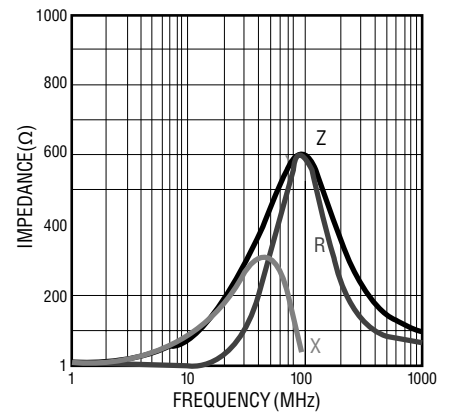
**MU 3261- 301Y**



**MU 3261- 471Y**



**MU 3261- 601Y**



Specifications are subject to change without notice.

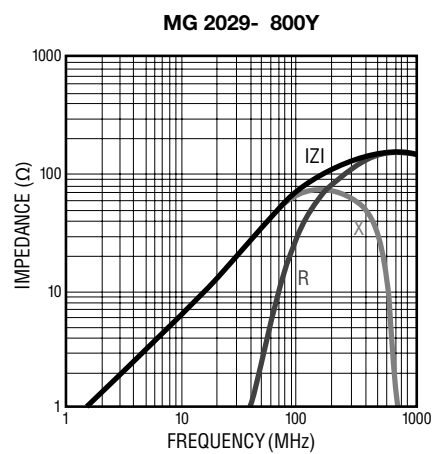
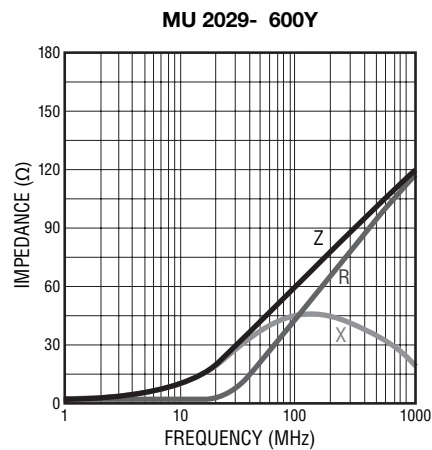
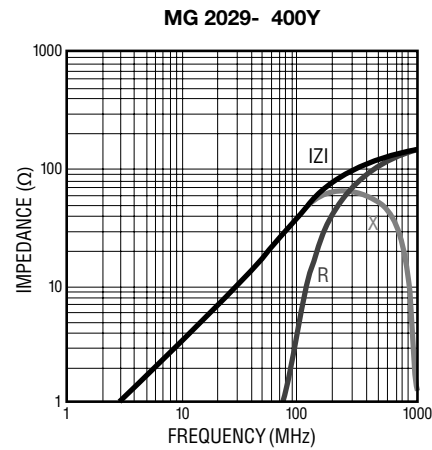
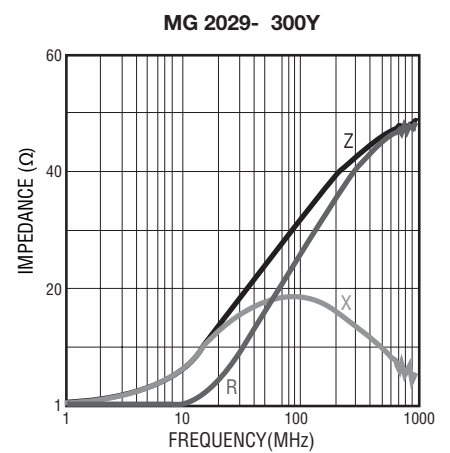
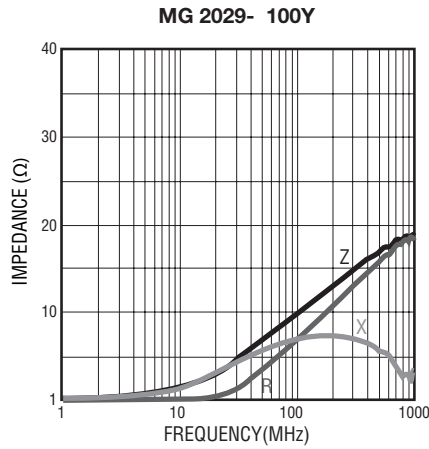
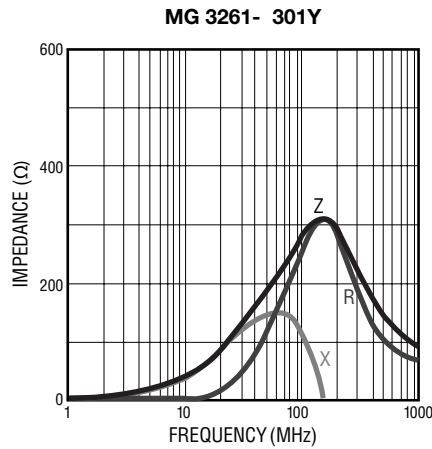
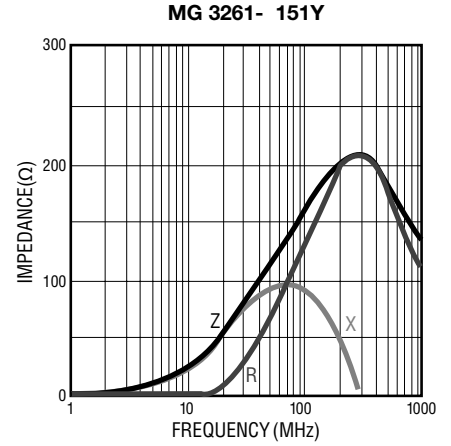
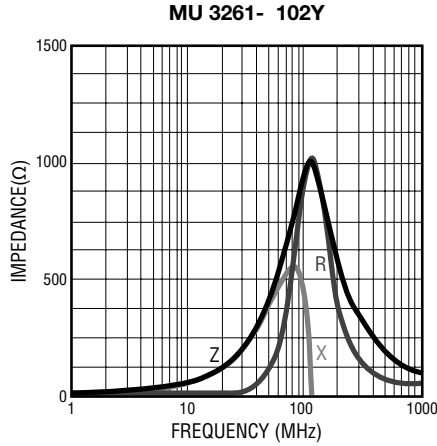
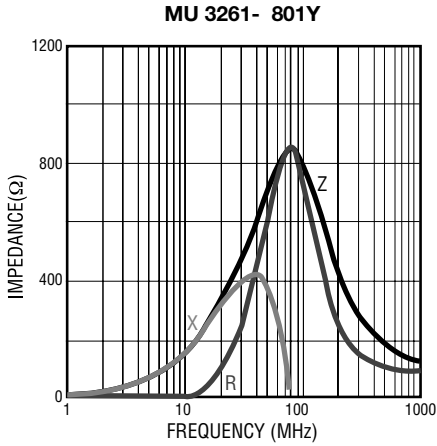
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# MG, MU, MZ Series High Impedance Chip Ferrite Beads

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## Electrical Specifications (continued)



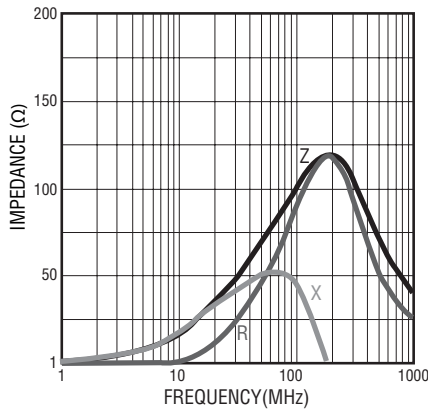
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# MG, MU, MZ Series High Impedance Chip Ferrite Beads

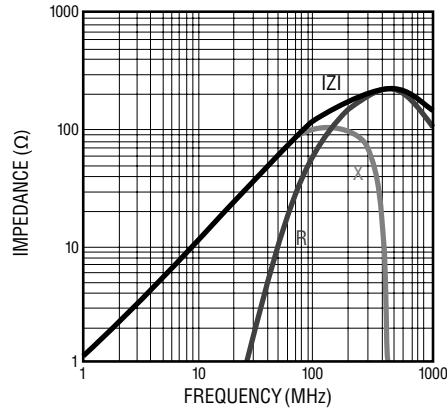
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## Electrical Specifications (continued)

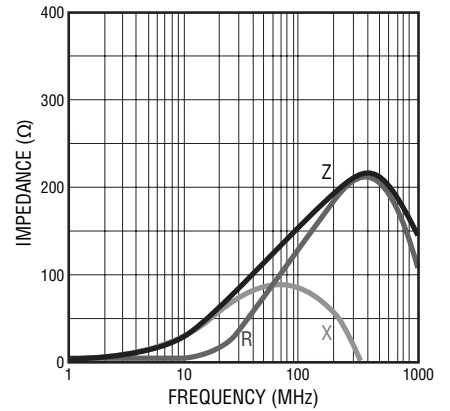
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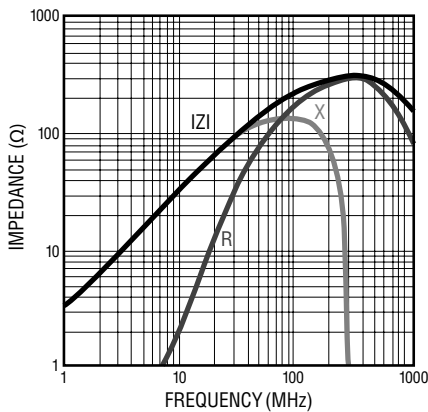
**MG 2029- 121Y**



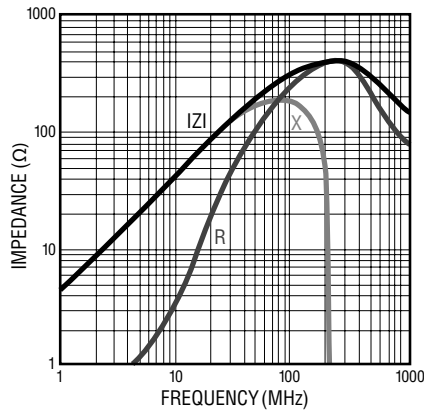
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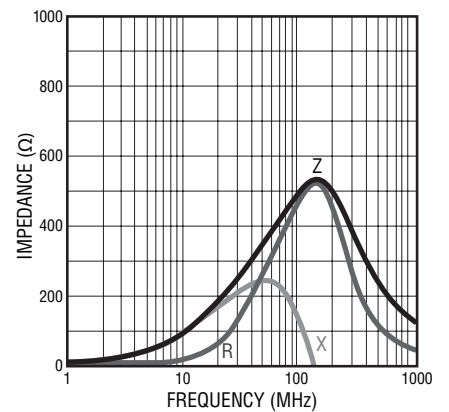
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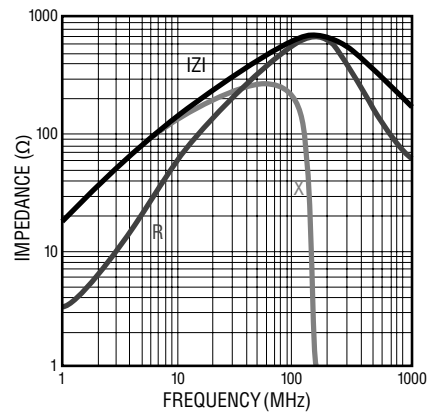
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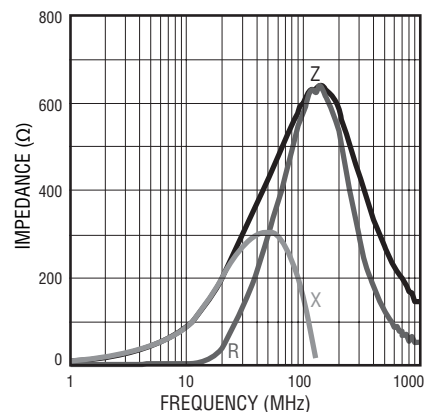
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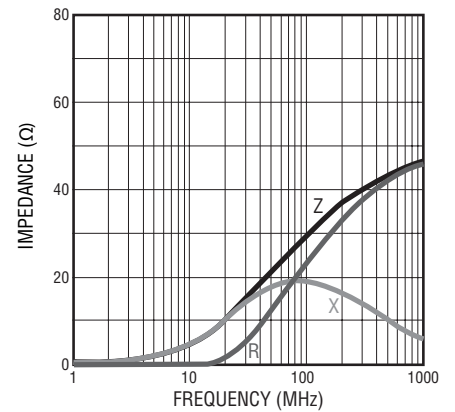
**MZ 2029- 601Y**



**MZ 2029- 601T**



**MU 1608- 300Y**



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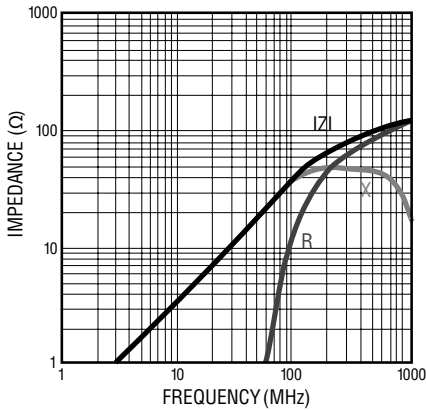
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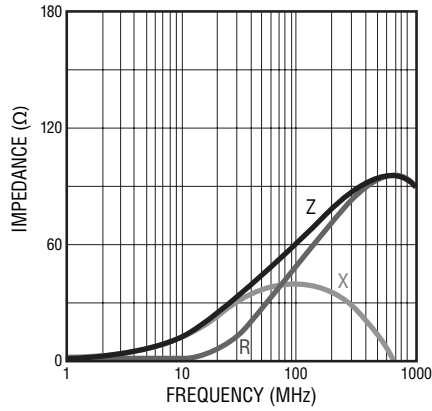
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## Electrical Specifications (continued)

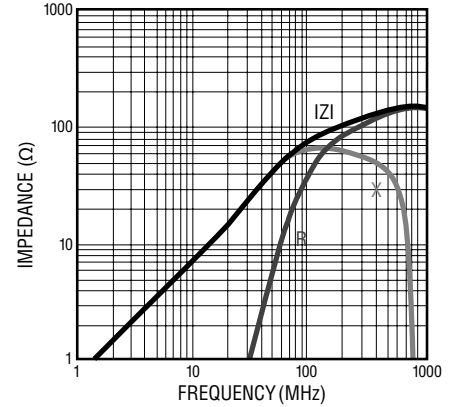
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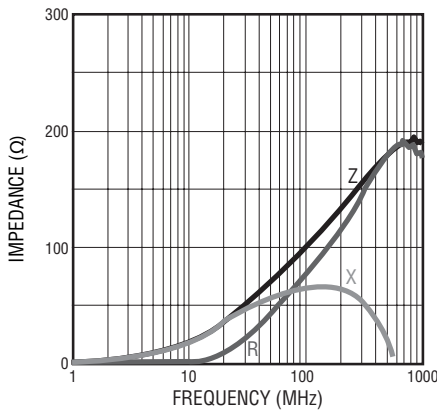
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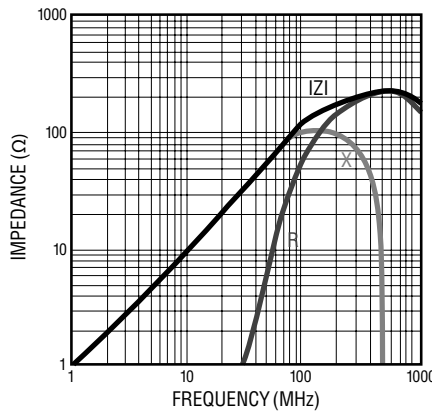
**MG 1608- 800Y**



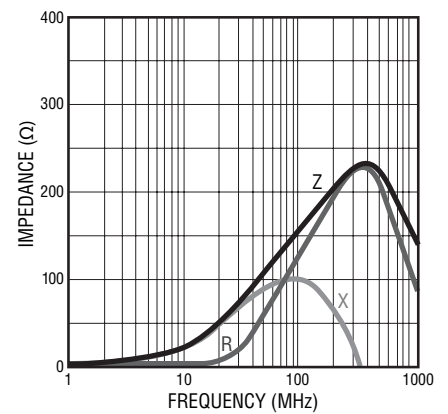
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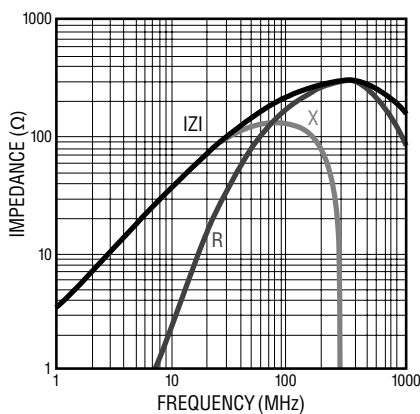
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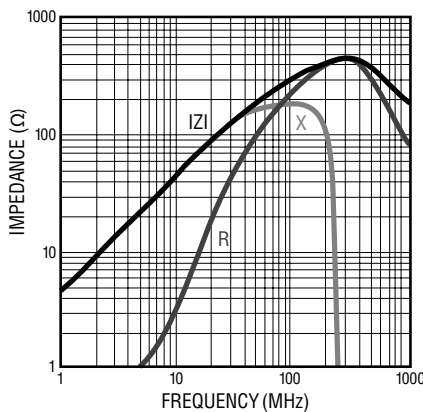
**MU 1608- 151Y**



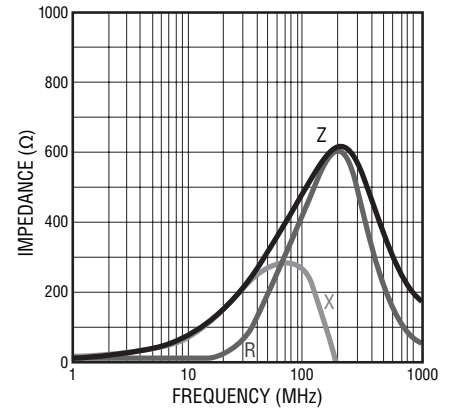
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**MU 1608- 301Y**



**MU 1608- 471Y**



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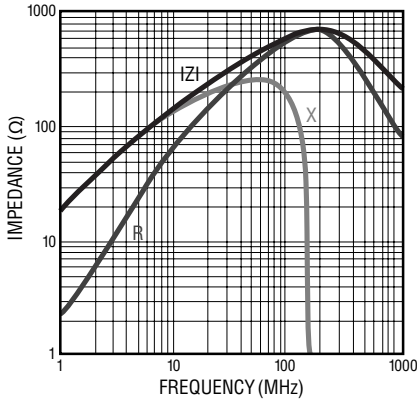
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# MG, MU, MZ Series High Impedance Chip Ferrite Beads

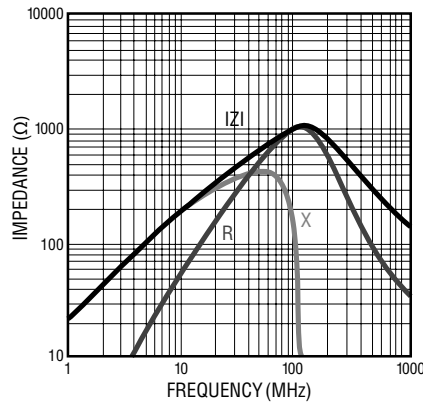
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## Electrical Specifications (continued)

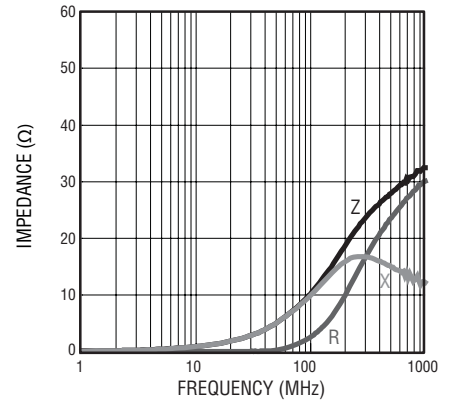
**MZ 1608- 601Y**



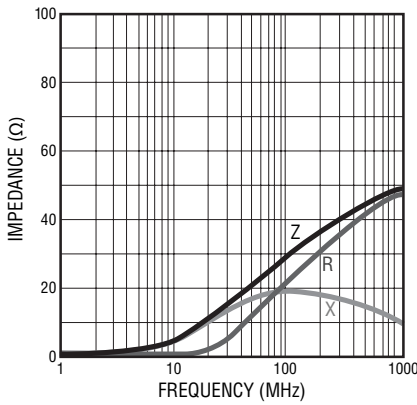
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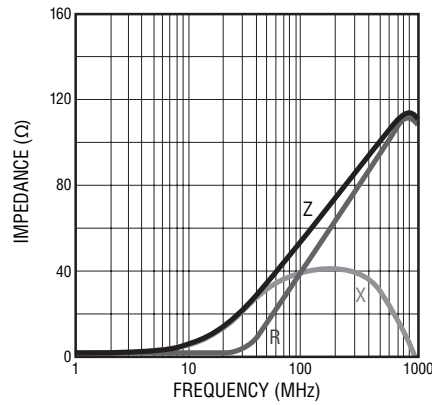
**MU 1005- 100Y**



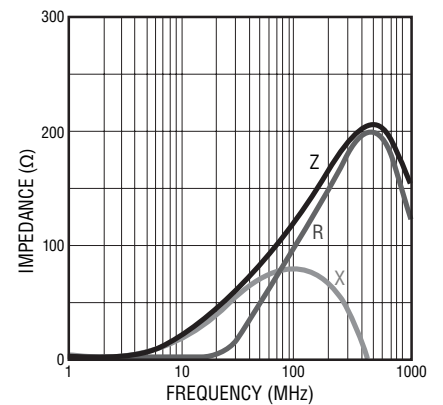
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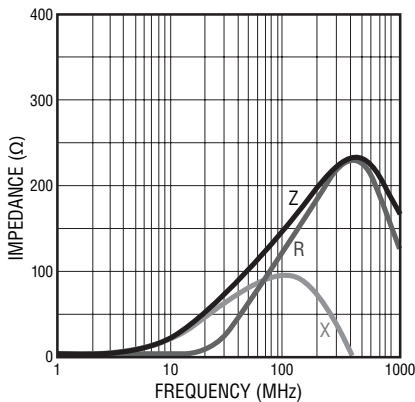
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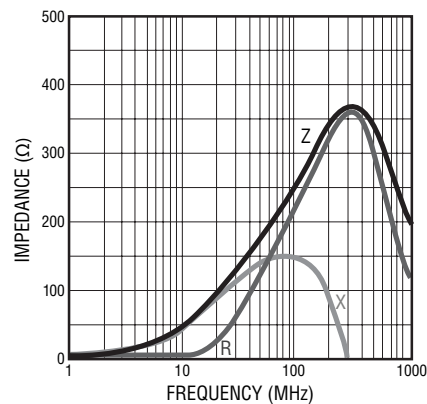
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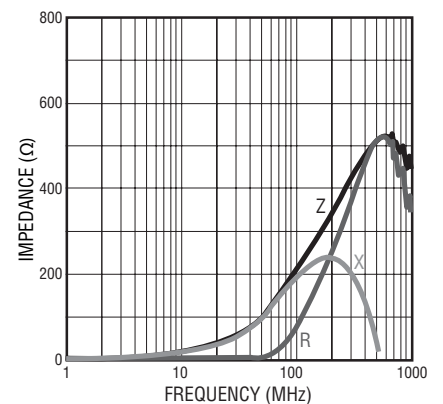
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**MU 1005- 221Y**



**MU 1005- 241Y**

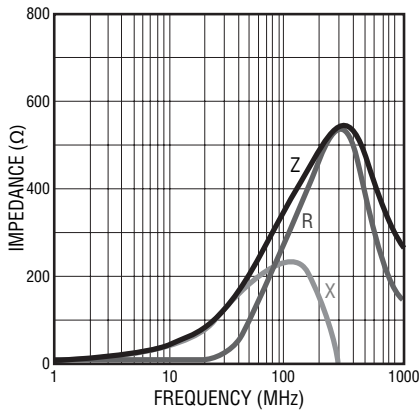


# MG, MU, MZ Series High Impedance Chip Ferrite Beads

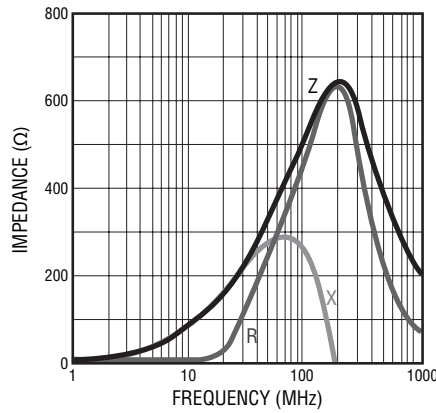
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## Electrical Specifications (continued)

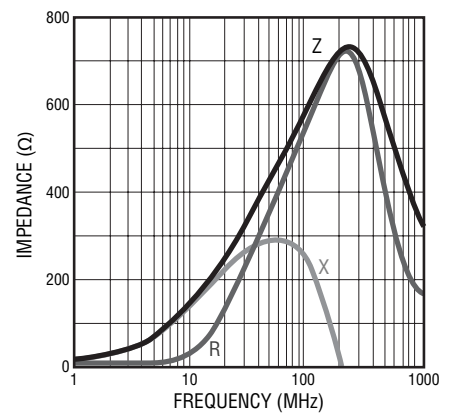
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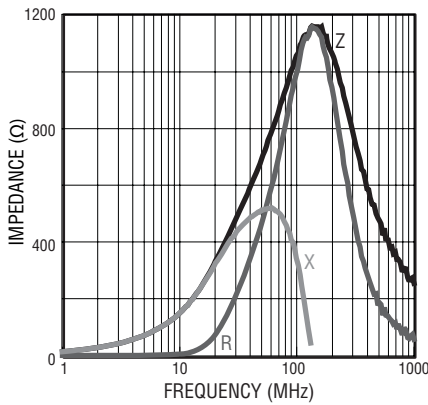
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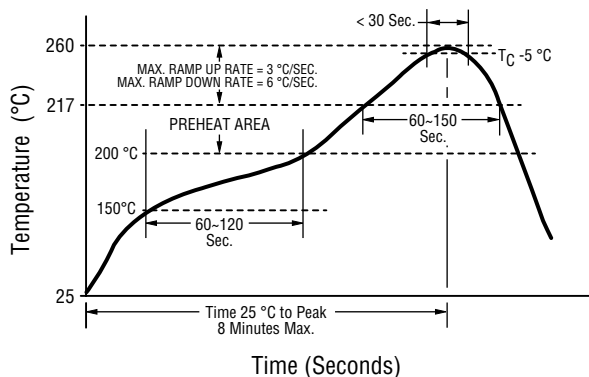
**MU 1005- 601Y**



**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.

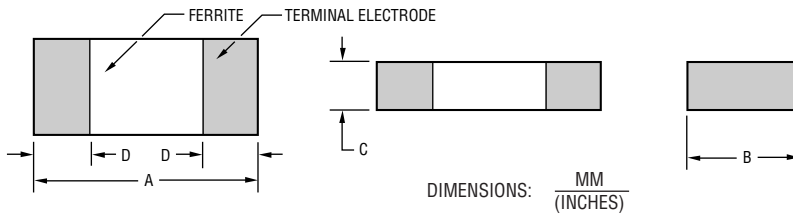
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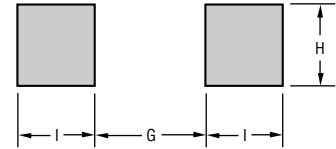
# MG, MU, MZ Series High Impedance Chip Ferrite Beads

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## Product Dimensions

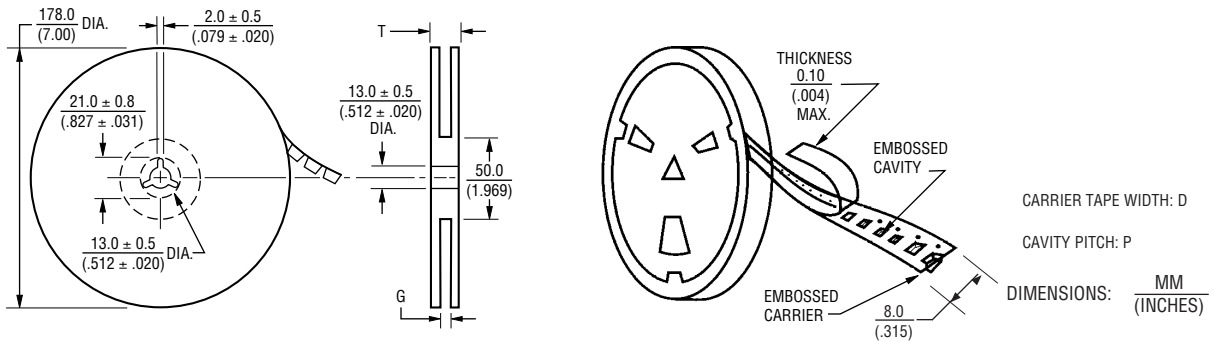


## Recommended Land Pattern



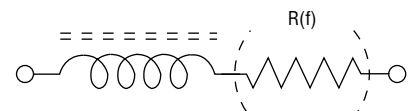
| Series | A                                      | B                                     | C                                     | D                                      | G                    | H                     | I                     |
|--------|--|---------------------------------------|---------------------------------------|--|----------------------|-----------------------|-----------------------|
| 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



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Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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