



**THE DATASHEET OF  
MH1608-221Y**





## Features

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

## Applications

- Power supply lines
- IC power lines
- Signal lines

# MH Series High Current Chip Ferrite Beads

### Electrical Specifications

Model Number	Impedance ( $\Omega$ ) at 100 MHz	RDC (m $\Omega$ ) Max.	IDC (A) Max.
MH3261-601Y	600 $\pm$ 25 %	100	2.0
MH2029-070Y	7 $\pm$ 25 %	30	3.0
MH2029-100Y	10 $\pm$ 25 %	10	6.0
MH2029-300Y	30 $\pm$ 25 %	25	3.0
MH2029-400Y	40 $\pm$ 25 %	20	5.0
MH2029-600Y	60 $\pm$ 25 %	20	5.0
MH2029-800Y	80 $\pm$ 25 %	40	3.0
MH2029-101Y	100 $\pm$ 25 %	100	2.0
MH2029-121Y	120 $\pm$ 25 %	100	2.0
MH2029-151Y	150 $\pm$ 25 %	100	2.0
MH2029-221Y	220 $\pm$ 25 %	100	2.0
MH2029-301Y	300 $\pm$ 25 %	200	1.0
MH2029-401Y	400 $\pm$ 25 %	100	2.0
MH2029-471Y	470 $\pm$ 25 %	200	1.0
MH2029-601Y	600 $\pm$ 25 %	200	1.0
MH1608-100Y	10 $\pm$ 25 %	10	6.0
MH1608-300Y	30 $\pm$ 25 %	40	3.0
MH1608-600Y	60 $\pm$ 25 %	40	3.0
MH1608-800Y	80 $\pm$ 25 %	40	3.0
MH1608-101Y	100 $\pm$ 25 %	40	3.0
MH1608-121Y	120 $\pm$ 25 %	100	2.0
MH1608-151Y	150 $\pm$ 25 %	100	2.0
MH1608-181Y	180 $\pm$ 25 %	100	2.0
MH1608-221Y	220 $\pm$ 25 %	100	2.0
MH1608-301Y	300 $\pm$ 25 %	200	1.0
MH1608-471Y	470 $\pm$ 25 %	200	1.0
MH1608-601Y	600 $\pm$ 25 %	200	1.0

### General Specifications

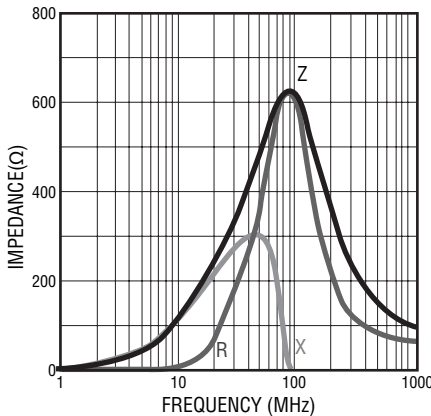
Operating Temperature .....-55 °C to +125 °C  
 Storage Temperature .....-55 °C to +125 °C  
 Storage Condition .....+40 °C max. at 70 % RH  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Resistance to Soldering Heat ..... +260 °C, 5 seconds  
 Rated Current.....Based on max .....temperature rise of +40 °C  
 Terminal Strength (Force "F" applied for 30 seconds)  
 3261 Series ..... 1.0 F (Kg)  
 2029 Series ..... 0.6 F (Kg)  
 1608 Series ..... 0.5 F (Kg)

### Materials

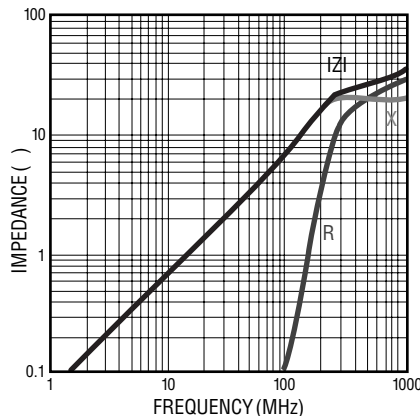
Core Material .....Ferrite  
 Internal Conductor .....Ag or Ag/Pd  
 Terminal .....Ag/Ni/Sn

### Electrical Specifications (continued)

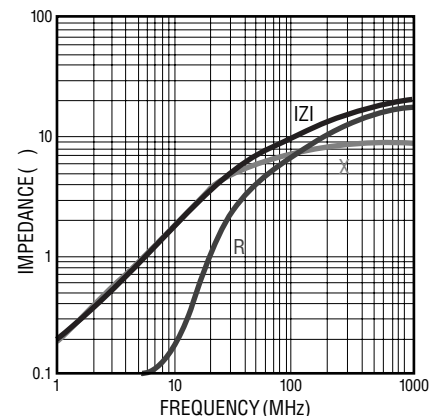
MH 3261- 601Y



MH 2029- 070Y



MH 2029- 100Y



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

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

\*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice.

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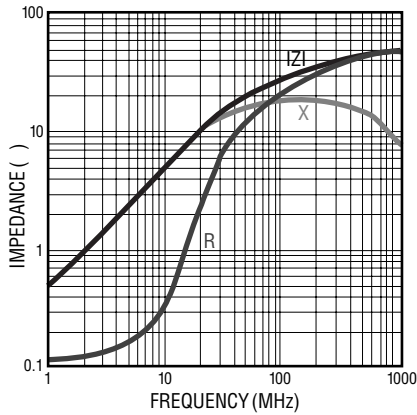
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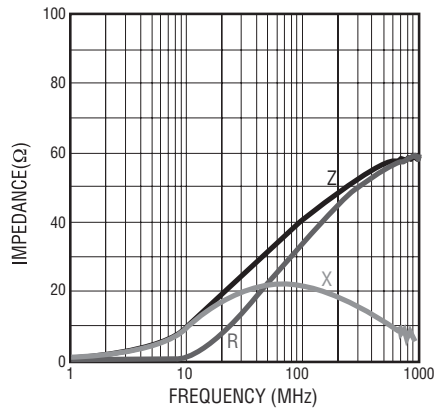
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## Electrical Specifications (continued)

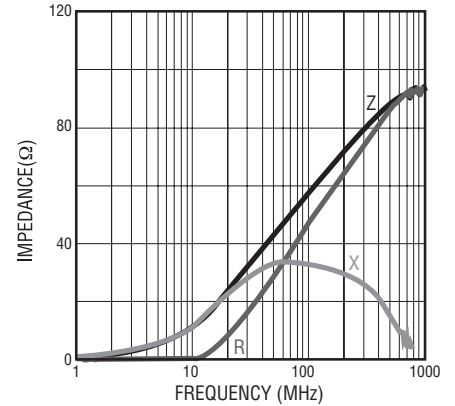
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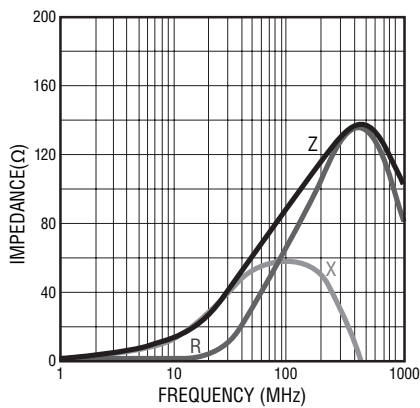
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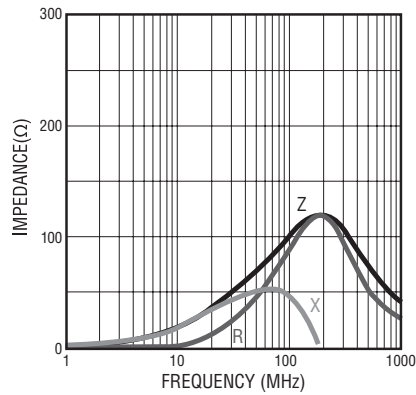
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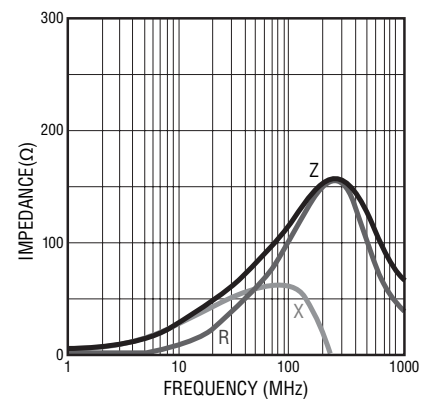
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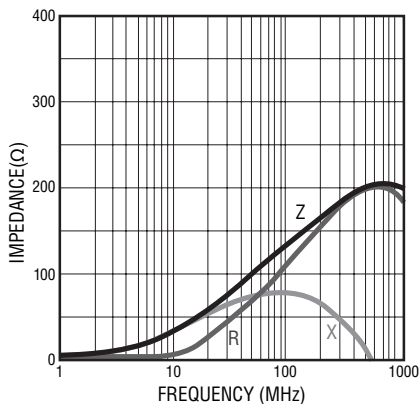
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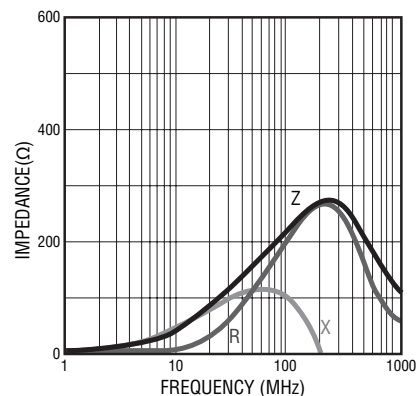
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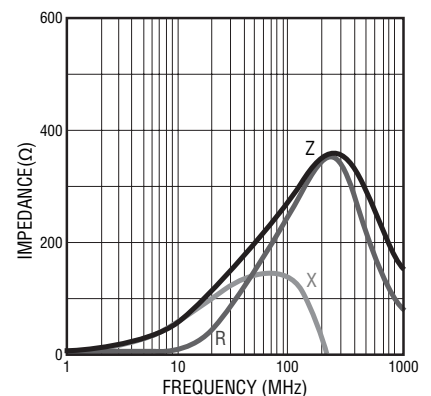
**MH 2029- 151Y**



**MH 2029- 221Y**



**MH 2029- 301Y**



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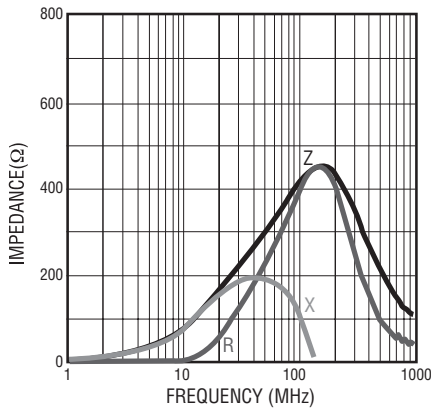
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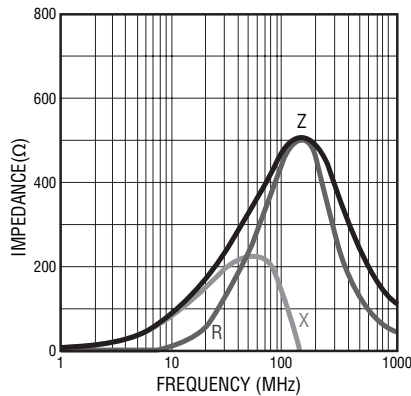
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## Electrical Specifications (continued)

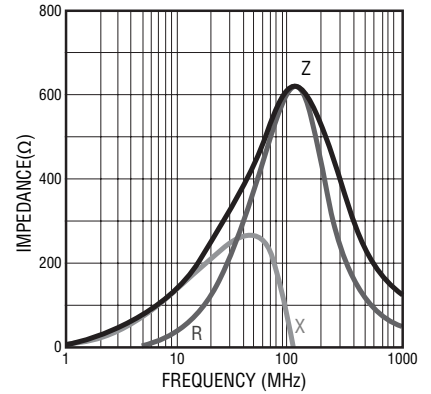
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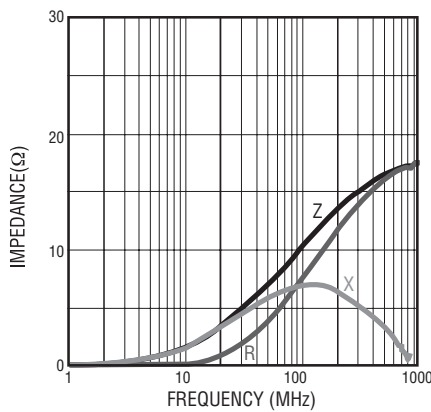
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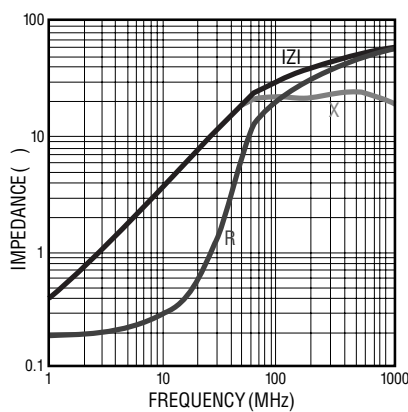
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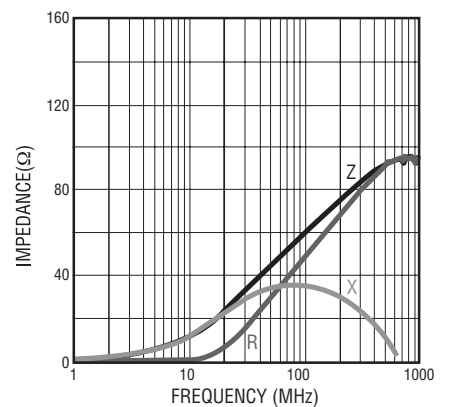
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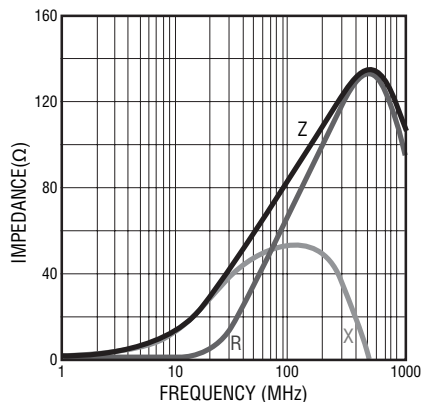
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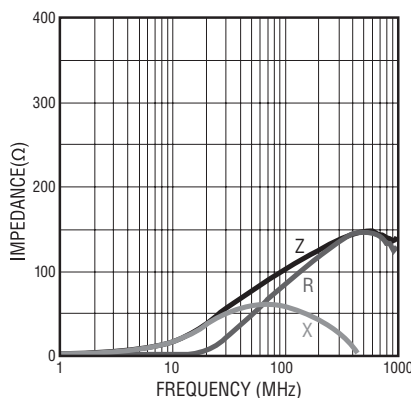
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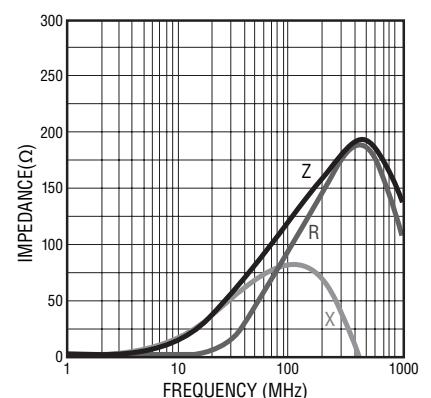
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**MH 1608- 101Y**



**MH 1608- 121Y**



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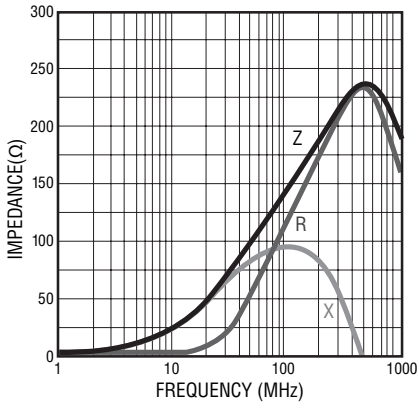
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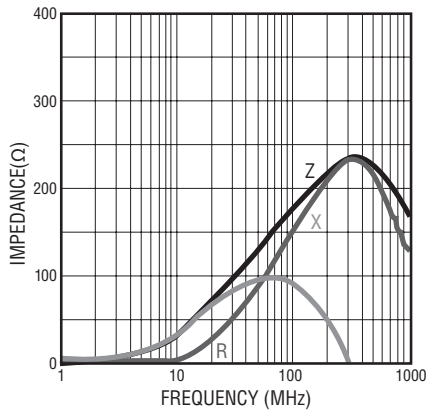
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## Electrical Specifications (continued)

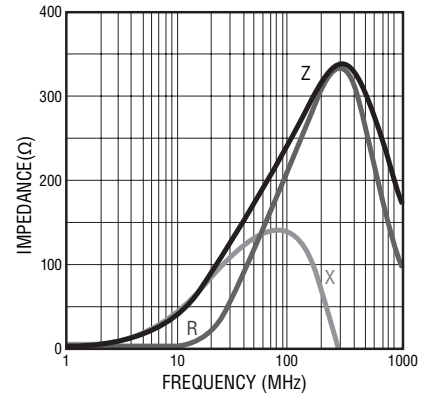
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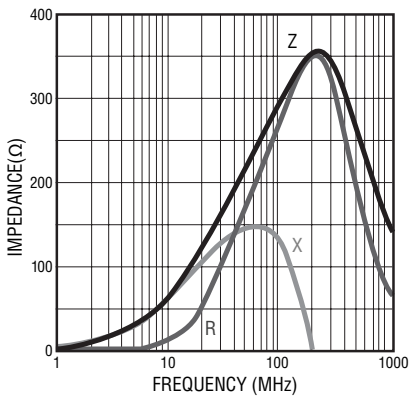
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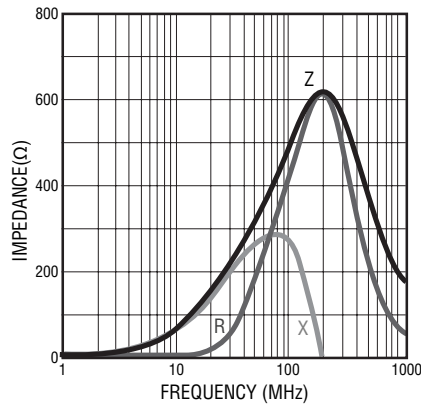
**MH 1608- 221Y**



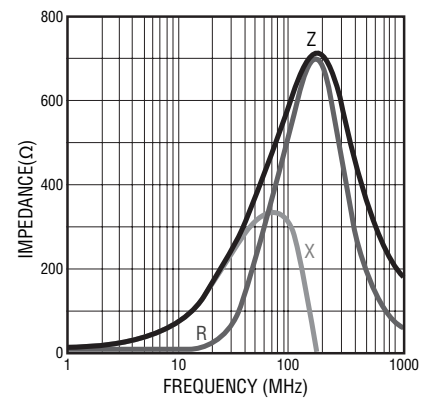
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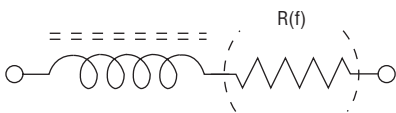
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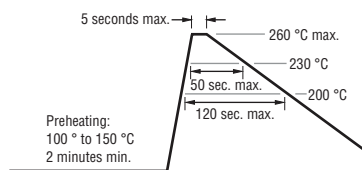
**MH 1608- 601Y**



## Equivalent Circuit



## Recommended Soldering



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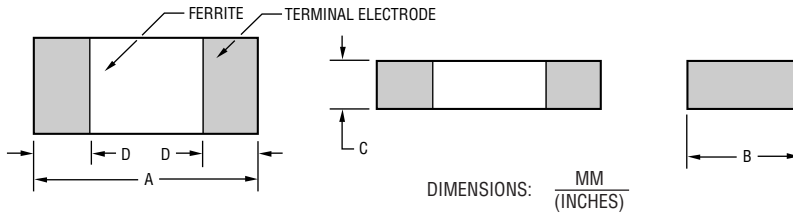
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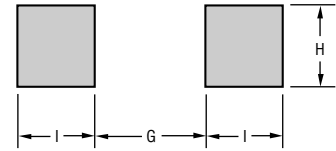
# MH Series High Current Chip Ferrite Beads

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## Product Dimensions

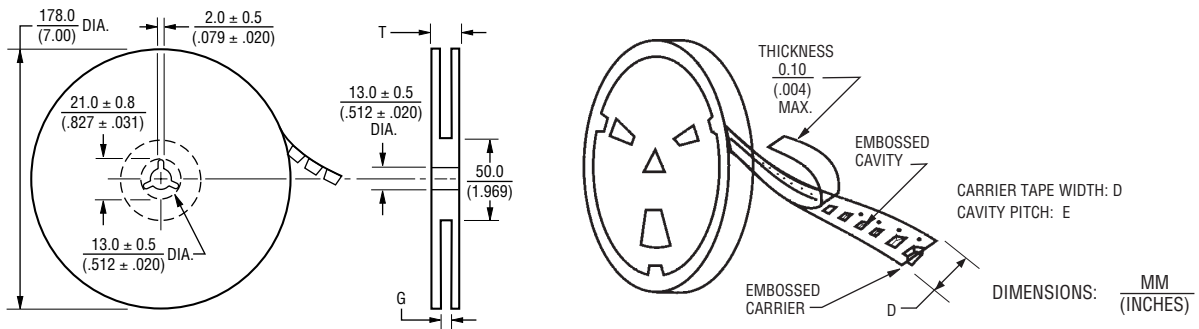


## Recommended Land Pattern



Series	A	B	C	D	G	H	I
3261	$\frac{3.2 \pm 0.2}{(.126 \pm .008)}$	$\frac{1.6 \pm 0.2}{(.063 \pm .008)}$	$\frac{1.1 \pm 0.2}{(.043 \pm .008)}$	$\frac{0.5 \pm 0.2}{(.020 \pm .008)}$	$\frac{2.0}{(.079)}$	$\frac{1.4}{(.053)}$	$\frac{1.1}{(.043)}$
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	$\frac{1.6 \pm 0.15}{(.063 \pm .006)}$	$\frac{0.8 \pm 0.2}{(.031 \pm .008)}$	$\frac{0.8 \pm 0.2}{(.031 \pm .008)}$	$\frac{0.3 \pm 0.2}{(.012 \pm .008)}$	$\frac{0.7}{(.028)}$	$\frac{0.7}{(.028)}$	$\frac{0.7}{(.028)}$

## Reel Dimensions



Series	Pcs. per Reel	Gross Weight (g)	D	E	G	T
3261	3,000	150	$\frac{8.0}{(.315)}$	$\frac{4.0}{(.157)}$	$\frac{10.0 + 0}{(.394 + 0)}$	$\frac{12.5}{(.492)}$
2029	4,000	120	$\frac{8.0}{(.315)}$	$\frac{4.0}{(.157)}$	$\frac{10.0 + 0}{(.394 + 0)}$	$\frac{12.5}{(.492)}$
1608	4,000	90	$\frac{8.0}{(.315)}$	$\frac{4.0}{(.157)}$	$\frac{10.0 + 0}{(.394 + 0)}$	$\frac{12.5}{(.492)}$

REV. 12/18

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