

### **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

MH45/MH32/MH20 Series High Current Chip Ferrite Beads

# **Electrical Specifications**

Model Number	Impedance (Ω) at 100 MHz	RDC (mΩ) Max.	IDC (A) Max.	
MH4532-800Y	80 ±25 %	10	6.0	
MH4532-121Y	120 ±25 %	20	5.0	
MH4532-131Y	130 ±25 %	40	3.0	
MH4532-151Y	150 ±25 %	20	5.0	
MH4532-132Y	1300 ±25 %	60	3.0	
MH4516-600Y	60 ±25 %	10	6.0	
MH4516-750Y	75 ±25 %	25	3.0	
MH4516-800Y	80 ±25 %	40	3.0	
MH3261-601Y	3261-601Y 600 ±25 %		2.0	
MH2029-070Y	7 ±25 %	30	3.0	
MH2029-100Y	10 ±25 %	10	6.0	
MH2029-300Y	30 ±25 %	25	3.0	
MH2029-400Y	40 ±25 %	20	5.0	
MH2029-600Y	60 ±25 %	20	5.0	
MH2029-800Y	2029-800Y 80 ±25 %		3.0	
MH2029-101Y	H2029-101Y 100 ±25 %		2.0	
MH2029-121Y	H2029-121Y 120 ±25 %		2.0	
MH2029-151Y	150 ±25 %	100	2.0	
MH2029-221Y	220 ±25 %	100	2.0	
MH2029-301Y	300 ±25 %	200	1.0	
MH2029-401Y	400 ±25 %	100	2.0	
MH2029-471Y	470 ±25 %	200	1.0	
MH2029-601Y	600 ±25 %	200	1.0	

#### **Additional Information**

Click these links for more information:



### **General Specifications**

**Operating Temperature** 

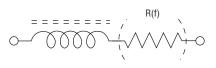
.....-55 °C to +125 °C Storage Temperature -55 °C to +125 °C

	5 0	
Rated CurrentBased on		
temperature rise of +4	0°C	

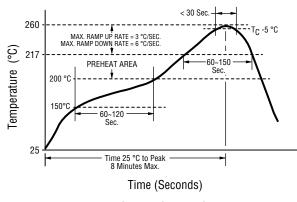
#### Materials

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

### **Equivalent Circuit**



### **Soldering Profile**



Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T <sub>smin</sub> ) - Temperature Max. (T <sub>smax</sub> ) - Time(t <sub>s</sub> ) from T <sub>smin</sub> to T <sub>smax</sub>	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T <sub>L</sub> to T <sub>p</sub> )	3 °C/second max.
Liquidous temperature (TL) Time (tL) maintained above TL	217 °C 60-150 seconds
Peak package body temperature (Tp)	260 °C
Time within 5 °C of Actual Peak Temperature (tp)	< 30 seconds
Ramp-Down Rate (Tp to TL)	6 °C/second max.
Time 25 °C to Peak Temperature	8 minutes max.

### **REFLOW TIMES: 3 TIMES MAX.**



WARNING Cancer and Reproductive Harm - 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.

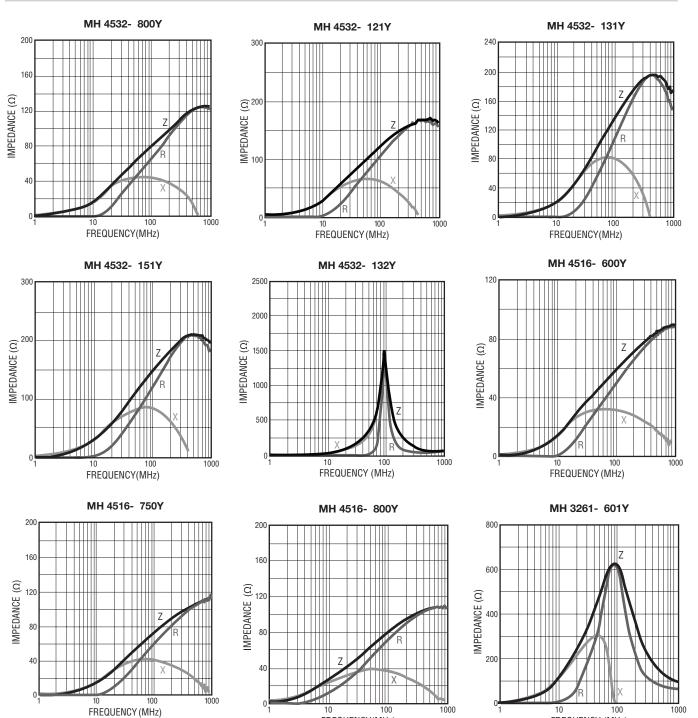
Users should verify actual device performance in their specific applications.

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### BOURNS

FREQUENCY (MHz)

#### **Electrical Specifications**



Specifications are subject to change without notice.

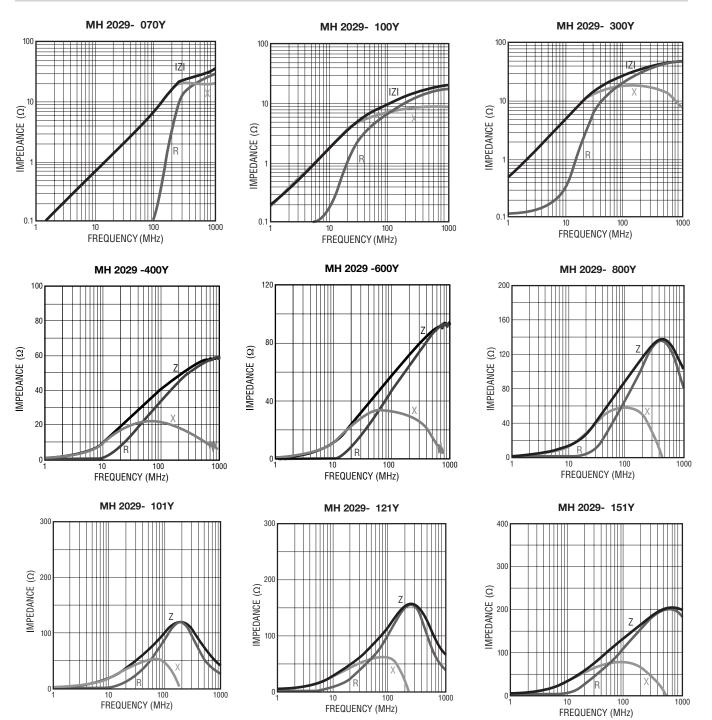
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FREQUENCY(MHz)

## BOURNS

**Electrical Specifications (continued)** 



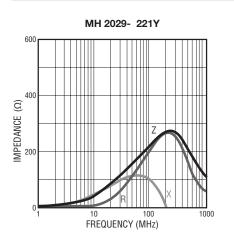
Specifications are subject to change without notice.

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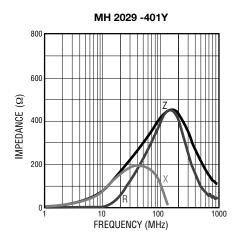
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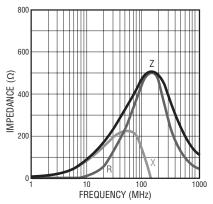
### **Electrical Specifications (continued)**



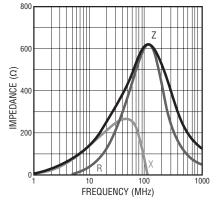
MH 2029- 301Y 600 400 IMPEDANCE (Ω) Ζ 0 100 1000 10 100 FREQUENCY (MHz)



MH 2029- 471Y



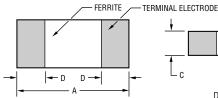


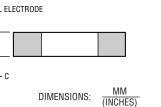


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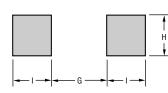
## BOURNS

### **Product Dimensions**





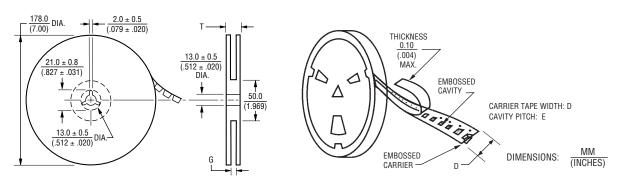
### **Recommended Land Pattern**



Series	Α	В	С	D	G	Н	I
MH4532	$\frac{4.5 \pm 0.2}{(.177 \pm .008)}$	$\frac{3.2 \pm 0.2}{(.126 \pm .008)}$	$\frac{1.5 \pm 0.2}{(.059 \pm .008)}$	$\frac{0.5 \pm 0.2}{(.020 \pm .008)}$	<u>3.3</u> (.130)	<u>3.4</u> (.134)	<u>1.05</u> (.041)
MH4516	$\frac{4.5 \pm 0.2}{(.177 \pm .008)}$	$\frac{1.6 \pm 0.2}{(.063 \pm .008)}$	$\frac{1.6 \pm 0.2}{(.063 \pm .008)}$	$\frac{0.5 \pm 0.2}{(.020 \pm .008)}$	<u>3.3</u> (.140)	<u>1.8</u> (.070)	<u>1.05</u> (.041)
MH3261	$\frac{3.2 \pm 0.2}{(.126 \pm .008)}$	$\frac{1.6 \pm 0.2}{(.063 \pm .008)}$	$\frac{1.1 \pm 0.2}{(.043 \pm .008)}$	$\frac{0.5 \pm 0.2}{(.020 \pm .008)}$	<u>2.2</u> (.087)	<u>1.8</u> (.070)	<u>1.05</u> (.041)
MH2029	$\frac{2.0 \pm 0.2}{(.079 \pm .008)}$	$\frac{1.25 \pm 0.2}{(.049 \pm .008)}$	$\frac{0.85 \pm 0.2}{(.033 \pm .008)}$	$\frac{0.5 \pm 0.3}{(.020 \pm .012)}$	<u>1.0</u> (.040)	<u>1.45</u> (.057)	<u>1.05</u> (.041)

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### **Reel Dimensions**



Series	Pcs. per Reel	D	E	G	Т
MH4532	1,000	<u>12.0</u> (.472)	<u>8.0</u> (.315)	$\frac{14.0+0}{(.551+0)}$	<u>16.5</u> (.650)
MH4516	2,000	<u>12.0</u> (.472)	<u>4.0</u> (.157)	$\frac{14.0+0}{(.551+0)}$	<u>16.5</u> (.650)
MH3261	3,000	<u>8.0</u> (.315)	<u>4.0</u> (.157)	$\frac{10.0+0}{(.394+0)}$	<u>    12.5    </u> (.492)
MH2029	4,000	<u>8.0</u> (.315)	4.0 (.157)	$\frac{10.0+0}{(.394+0)}$	<u>12.5</u> (.492)

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# **Mouser Electronics**

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