

## **Features**

- Compact size
- High current
- Wide impedance range
- RoHS compliant\* and halogen free\*\*

# BOURNS

# MH1608 Series High Current Chip Ferrite Beads

## **Electrical Specifications**

Model Number	Impedance (Ω) at 100 MHz	RDC (mΩ) Max.	IDC (A) Max.
MH1608-100Y	10 ±25 %	10	6.0
MH1608-300Y	30 ±25 %	40	3.0
MH1608-300T	30 ±25 %	10	5.0
MH1608-600Y	60 ±25 %	40	3.0
MH1608-600T	60 ±25 %	20	4.0
MH1608-800Y	80 ±25 %	40	3.0
MH1608-800T	80 ±25 %	30	3.0
MH1608-101Y	100 ±25 %	40	3.0
MH1608-101T	100 ±25 %	30	3.0
MH1608-121Y	120 ±25 %	100	2.0
MH1608-121T	120 ±25 %	35	3.0
MH1608-151Y	150 ±25 %	100	2.0
MH1608-151T	150 ±25 %	40	2.5
MH1608-181Y	180 ±25 %	100	2.0
MH1608-221Y	220 ±25 %	100	2.0
MH1608-221T	220 ±25 %	50	2.3
MH1608-301Y	300 ±25 %	200	1.0
MH1608-301T	300 ±25 %	70	2.2
MH1608-471Y	470 ±25 %	200	1.0
MH1608-601Y	600 ±25 %	200	1.0

#### **Additional Information**

Click these links for more information:



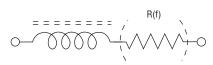
## **General Specifications**

Operating Temperatur	re
	55 °C to +125 °C
Storage Temperature	
	55 °C to +125 °C
Rated Current	Based on max
	ature rise of +40 °C
Moisture Sensitivity L	evel1
ESD Classification (H	BM)N/A

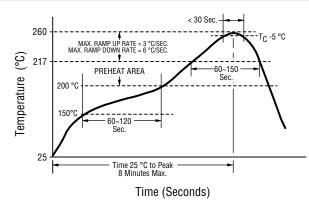
### Materials

Core Material	Ferrite
Internal Conductor	Ag or Ag/Pd
Terminal	Ag/Ni/Sn
Packaging	4,000 pcs/7-inch reel

#### **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 $(t_p)$	< 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 - <u>www.P65Warnings.ca.gov</u>

RoHS Directive 2015/863, Mar 31, 2015 and Annex.

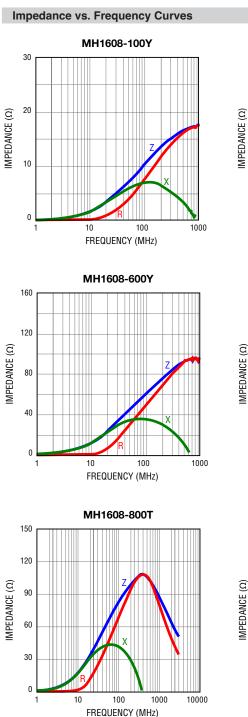
\*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

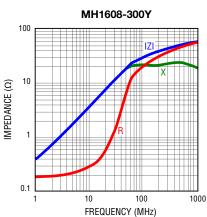
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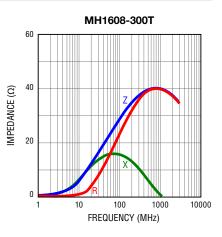
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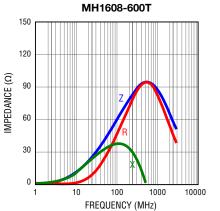
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MH1608-101Y

400

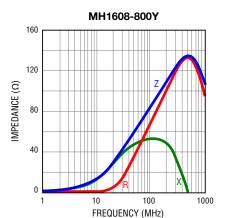
300

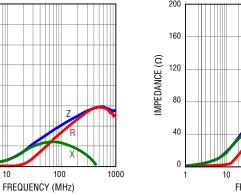
200

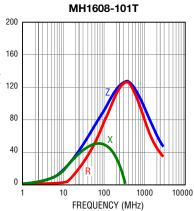
100

0

1







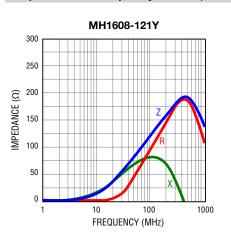
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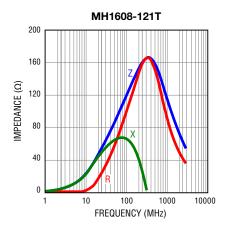
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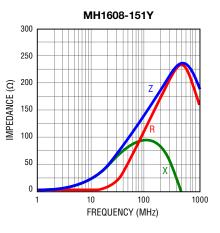
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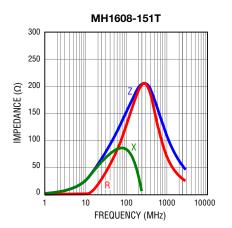
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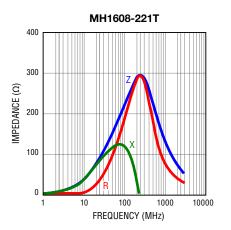
Impedance vs. Frequency Curves (Continued)

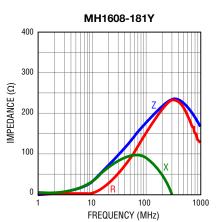


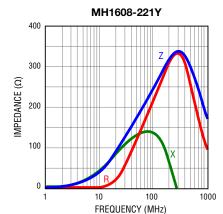


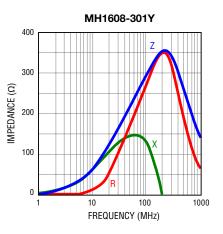


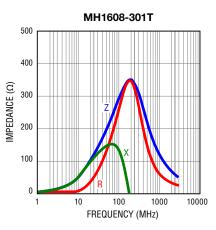












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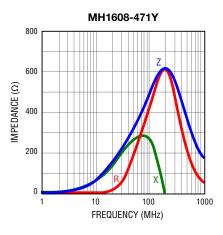
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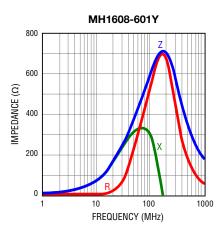
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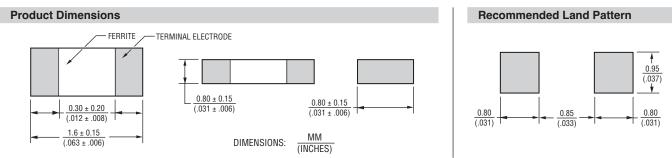
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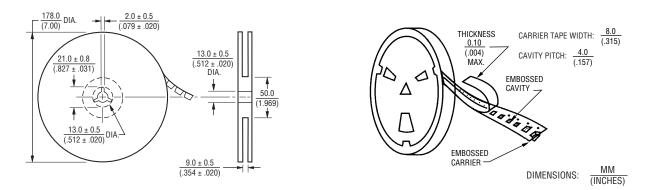
#### Impedance vs. Frequency Curves (Continued)







### **Reel Dimensions**



### REV. 06/22

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