



Features

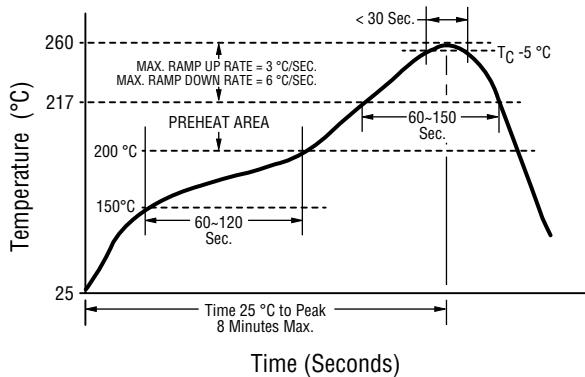
- Compact size
- High current
- Wide impedance range
- RoHS compliant* and halogen free**

MH1005 Series High Current Chip Ferrite Beads

Electrical Specifications

Model Number	Impedance (Ω) at 100 MHz	RDC (m Ω) Max.	IDC (A) Max.
MH1005-300Y	30 \pm 25 %	22	3.0
MH1005-800Y	80 \pm 25 %	38	2.3
MH1005-121Y	120 \pm 25 %	50	2.0
MH1005-221Y	220 \pm 25 %	95	1.5
MH1005-301Y	300 \pm 25 %	150	1.2
MH1005-471Y	470 \pm 25 %	180	1.1
MH1005-601Y	600 \pm 25 %	200	1.0

Soldering Profile



REFLOW TIMES: 3 TIMES MAX.

Profile Feature	Pb Free Assembly
Preheat - Temperature Min. (T_{smin}) - Temperature Max. (T_{smax}) - Time (t_s) from T_{smin} to T_{smax}	150 °C 200 °C 60-120 seconds
Ramp-up Rate (T_L to T_p)	3 °C/second max.
Liquidous temperature (T_L) Time (t_L) maintained above T_L	217 °C 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.

Additional Information

Click these links for more information:



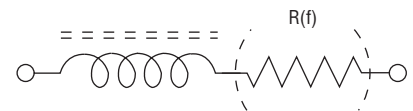
General Specifications

Operating Temperature-55 °C to +125 °C
 Storage Temperature (Component Mounted)-55 °C to +125 °C
 Rated Current.....Based on max temperature rise of +40 °C
 Moisture Sensitivity Level.....1
 ESD Classification (HBM)..... N/A

Materials

Core Material.....Ferrite
 Internal Conductor.....Ag or Ag/Pd
 Terminal.....Ag/Ni/Sn
 Packaging..... 10,000 pcs./7-inch reel

Equivalent Circuit



BOURNS®

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 Email: americus@bourns.com
www.bourns.com



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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.

Specifications are subject to change without notice.

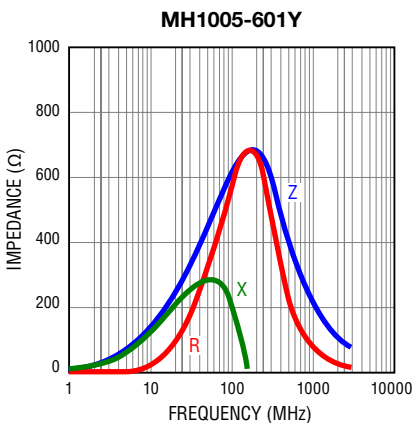
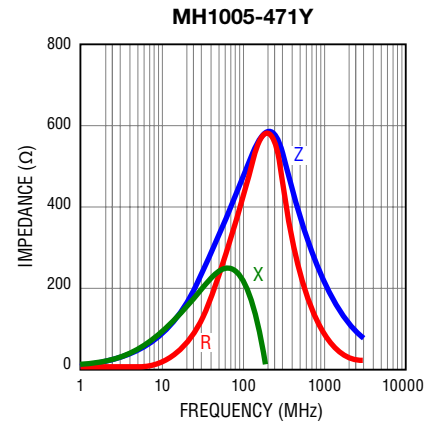
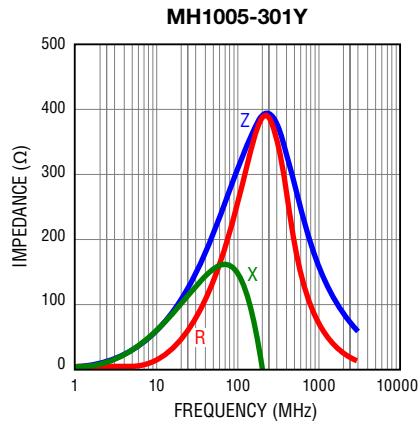
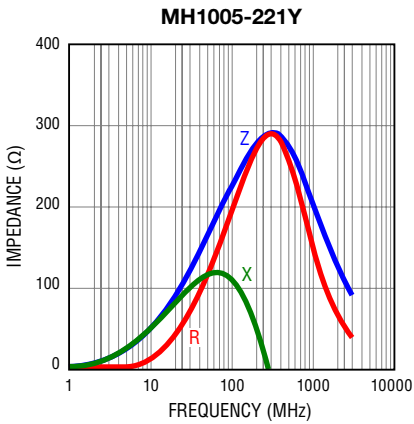
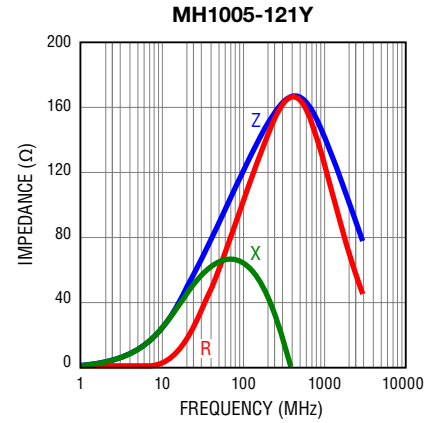
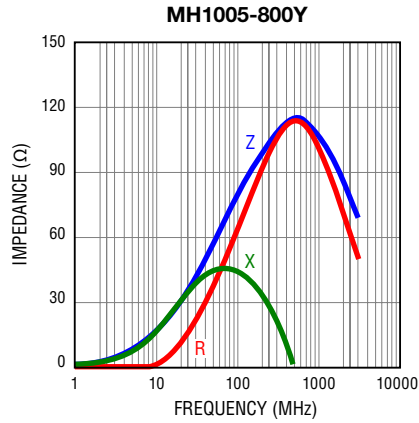
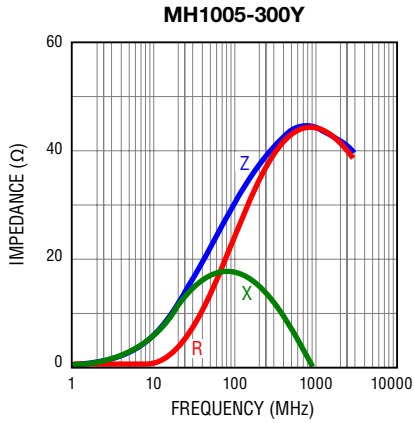
Users should verify actual device performance in their specific applications.

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Impedance vs. Frequency Curves



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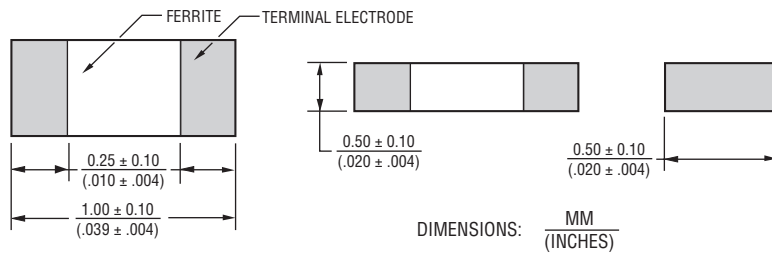
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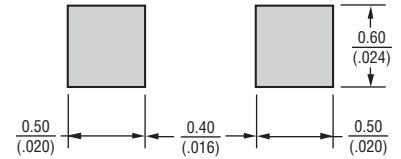
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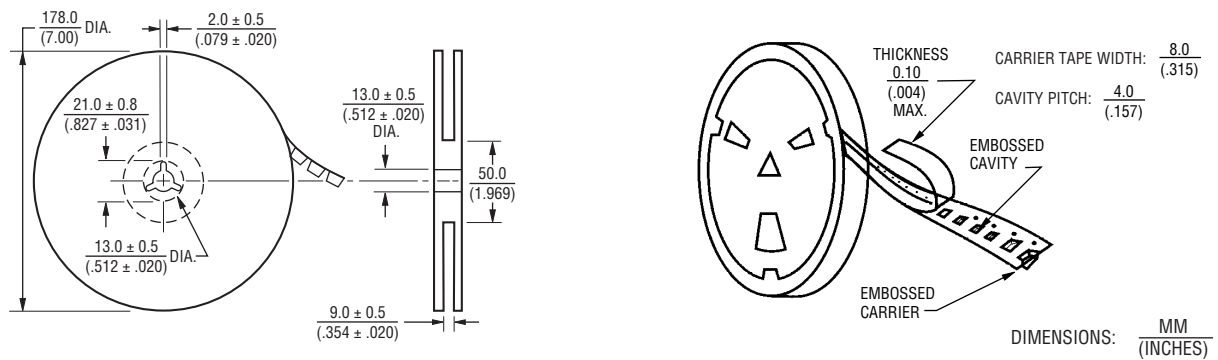
Product Dimensions



Recommended Land Pattern



Reel Dimensions



REV. 06/22

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