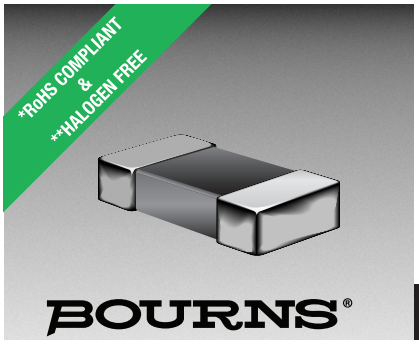


Features

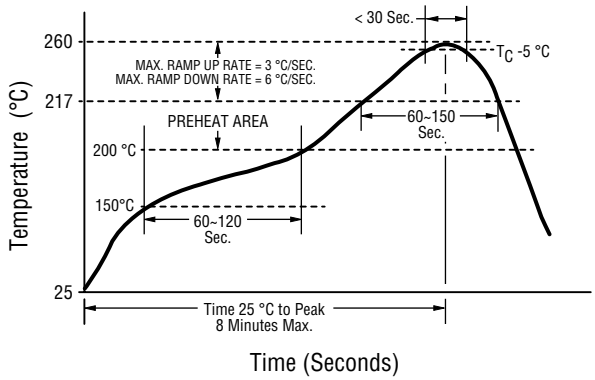
- Compact size
- High current
- Wide impedance range
- RoHS compliant* and halogen free**

MH1005 Series High Current Chip Ferrite Beads

Electrical Specifications

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

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

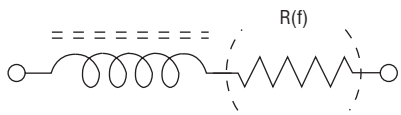
General Specifications

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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Tel: +886-2 2562-4117
Email: asiacus@bourns.com

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Tel: +36 88 885 877
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Tel: +1-951 781-5500
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.

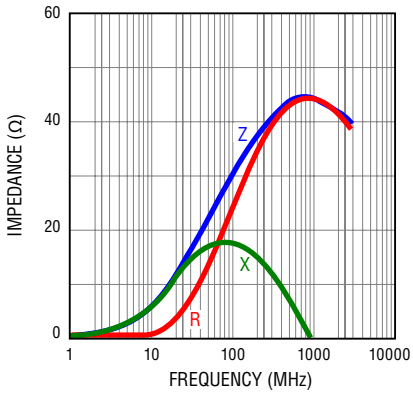
**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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Users should verify actual device performance in their specific applications.
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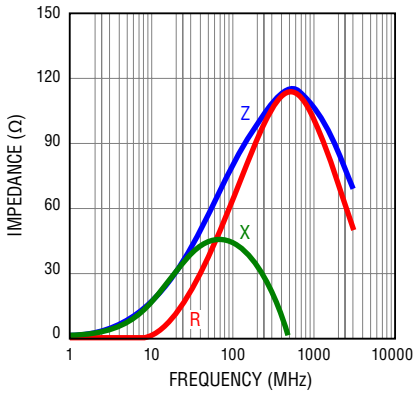
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Impedance vs. Frequency Curves

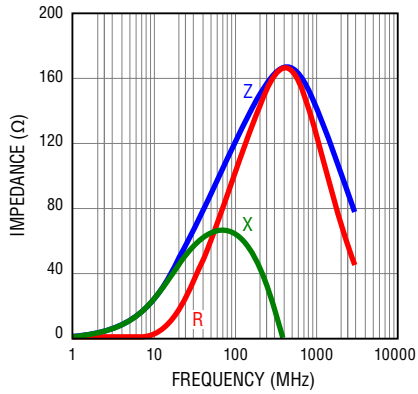
MH1005-300Y



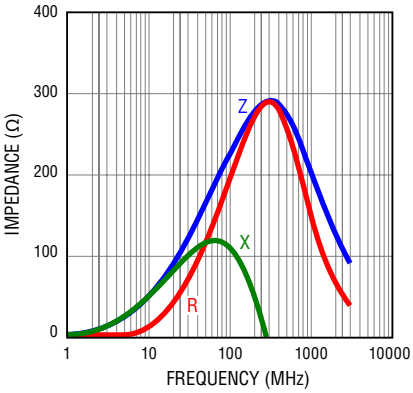
MH1005-800Y



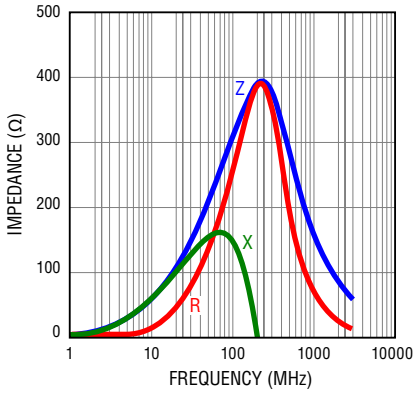
MH1005-121Y



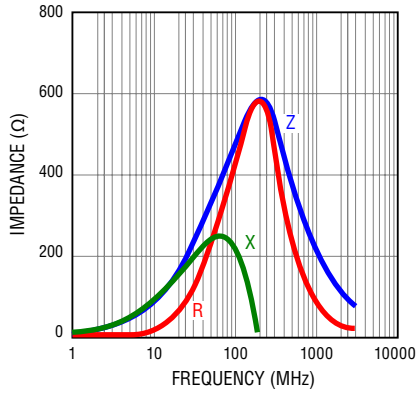
MH1005-221Y



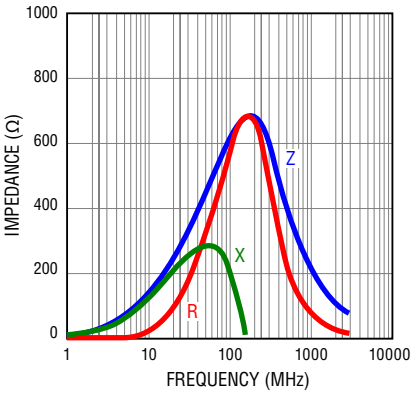
MH1005-301Y



MH1005-471Y



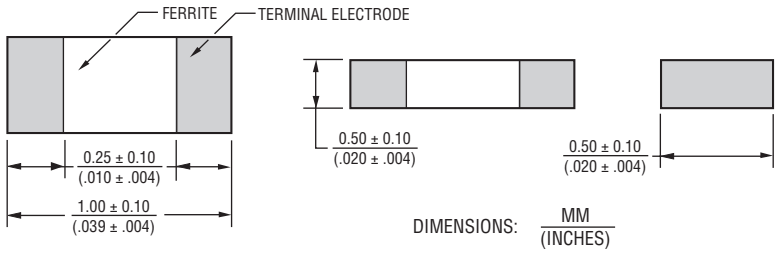
MH1005-601Y



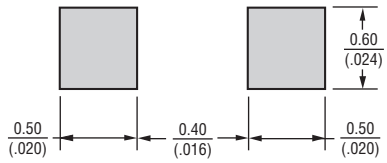
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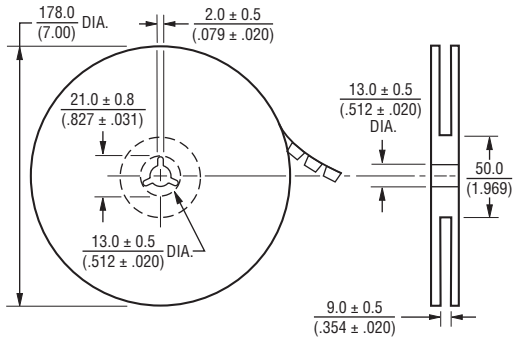
Product Dimensions

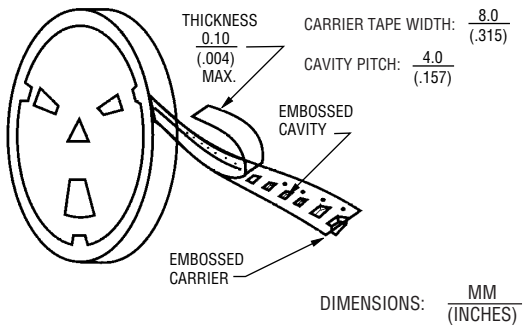


Recommended Land Pattern



Reel Dimensions





REV. 06/22

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