

Ferrites for EMI Suppression

For ICs and Connectors

MH Series(Multiple Holes)

Issue date: May 2011

- All specifications are subject to change without notice.
 - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
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Ferrite Cores for EMI Suppression For IC and Connector

MH Series(Multiple Holes)

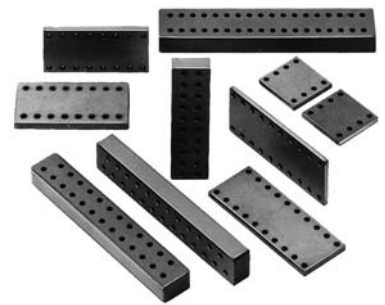
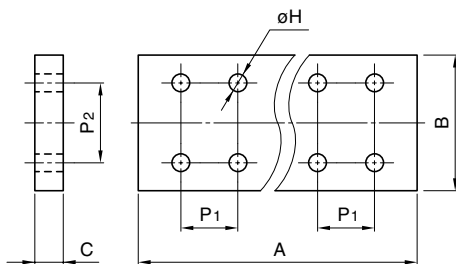
FEATURES

- The MH Series provides simple, effective EMC suppression at terminal pins. Terminal pins that can be inserted include those of DIP type ICs, DIP IC sockets, and grid square type connector receptacles.
- The comprehensive product lineup offers numerous sizes, hole configurations, and ferrite materials. The variety of impedance vs. frequency characteristics enables optimization of EMC suppression performance for a wide range of possible applications.

APPLICATIONS

Suppression of digital signal ringing and prevention RFI from IC pins, suppression of interface cable EMC, preventing the entry of RFI into a device, and shaping the waveform of digital signals.

SHAPES AND DIMENSIONS/CHARACTERISTICS



MATERIAL CHARACTERISTICS

| Material | Initial permeability μ_i | Temperature factor of initial permeability $\alpha_{\mu ir} \times 10^{-6}/^{\circ}\text{C}$ | Curie temperature T_c ($^{\circ}\text{C}$) | Saturation magnetic flux density B_s (mT) |
|----------|------------------------------|--|--|---|
| HF70 | 1500 | 1 to 6 | >100 | 280[H=1600A/m] |

FOR IC

| Part No. | Dimensions(mm) | | | | | | Number of holes | Impedance Z(Ω)at 23 $^{\circ}\text{C}$ | |
|-------------------|----------------|-------|-----|----------------|----------------|----------|-----------------|---|-------------|
| | A | B | C* | P ₁ | P ₂ | ϕ H | | 10MHz typ. | 100MHz typ. |
| HF70MH2.5X7.6X8 | 10.16 | 10.16 | 1 | 2.54 | 7.62 | 1.08 | 8 | 9 | 20 |
| HF70MH2.5X7.6X14 | 17.78 | 10.16 | 1 | 2.54 | 7.62 | 1.08 | 14 | 9 | 20 |
| HF70MH2.5X7.6X16 | 20.32 | 10.16 | 1 | 2.54 | 7.62 | 1.08 | 16 | 9 | 20 |
| HF70MH2.5X7.6X16A | 20.32 | 10.16 | 1.5 | 2.54 | 7.62 | 1.08 | 16 | 13 | 29 |
| HF70MH2.5X7.6X20 | 25.4 | 10.16 | 1 | 2.54 | 7.62 | 1.08 | 20 | 9 | 20 |

* Dimension C is alterable on request.

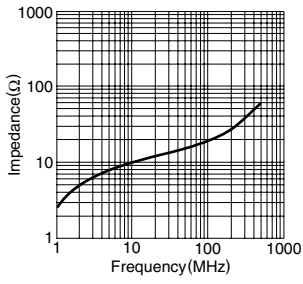
FOR CONNECTOR

| Part No. | Dimensions(mm) | | | | | | Number of holes | Impedance Z(Ω)at 23 $^{\circ}\text{C}$ | |
|------------------|----------------|---|----|----------------|----------------|----------|-----------------|---|-------------|
| | A | B | C* | P ₁ | P ₂ | ϕ H | | 10MHz typ. | 100MHz typ. |
| HF70MH2.5X2.5X8 | 10.16 | 7 | 3 | 2.54 | 2.54 | 1.08 | 8 | 39 | 61 |
| HF70MH2.5X2.5X16 | 20.32 | 7 | 3 | 2.54 | 2.54 | 1.08 | 16 | 39 | 61 |
| HF70MH2.5X2.5X20 | 25.4 | 7 | 3 | 2.54 | 2.54 | 1.08 | 20 | 39 | 61 |

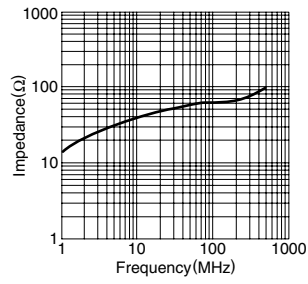
* Dimension C is alterable on request.

TYPICAL ELECTRICAL CHARACTERISTICS
IMPEDANCE vs. FREQUENCY CHARACTERISTICS

HF70MH2.5X7.6X□□*



HF70MH2.5X2.5X□□



* Number of holes

