



Ni-Zn

Ferrites for EMI Suppression

RH/RU series(Cylindrical)

RH

RU

 **REMINDERS FOR USING THESE PRODUCTS**

Please be sure to read this manual thoroughly before using the products.

The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.

The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.

When using the products for specific purposes, please first make confirmations in areas such as safety, reliability, and quality.

Please understand that we are not in a position to be held responsible for any damage or the like caused by any use exceeding the range or conditions of this specification sheet or by any use in the specific applications.

- | | |
|---|--|
| (1) Aerospace/Aviation equipment | (8) Public information-processing equipment |
| (2) Transportation equipment (electric trains, ships, etc.) | (9) Military equipment |
| (3) Medical equipment | (10) Electric heating apparatus, burning equipment |
| (4) Power-generation control equipment | (11) Disaster prevention/crime prevention equipment |
| (5) Atomic energy-related equipment | (12) Safety equipment |
| (6) Seabed equipment | (13) Other applications that are not considered general-purpose applications |
| (7) Transportation control equipment | |

When using this product in general-purpose standard applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc to ensure higher safety.

Ferrites for EMI Suppression

Product compatible with RoHS directive
Halogen-free

Overview of the RH Series

FEATURES

- For use with round cables, both the clamp-on type and the regular type cores are available. Clamp-on cores can be attached to an existing cable while avoiding removal or cutting of the cable.

APPLICATION

Imaging devices, audio equipment, automotive electronics, telecommunication devices, office automation equipment, and digital interface various other cables.

- Absorption EMI and penetrating noise
- Prevent parasitic oscillation

PART NUMBER CONSTRUCTION

RH series (Regular type)

| | | | | | | | |
|----------|------------|------------------------------|---|---------------------|---|------------------------------|---------------|
| HF70 | RH | 7 | × | 8 | × | 4 | □□□□ |
| Material | Core shape | Outer diameter dimensions(A) | | Width dimensions(B) | | Inner diameter dimensions(C) | Internal code |

RU series (Clamp-on type)

| | | | | | | | |
|----------|------------|------------------------------|---|----------------------|---|------------------------------|---------------|
| HF70 | RU | 10 | × | 20 | × | 5 | □□□□ |
| Material | Core shape | Outer diameter dimensions(A) | | Length dimensions(B) | | Inner diameter dimensions(C) | Internal code |


RANGE OF USE AND STORAGE TEMPERATURE

| Temperature range* | |
|----------------------------|----------------------------|
| Operating temperature (°C) | Storage temperature** (°C) |
| -40 to +85 | -40 to +85 |

* The temperature range has a different case by materials.

** The Storage temperature range is for after the circuit board is mounted.

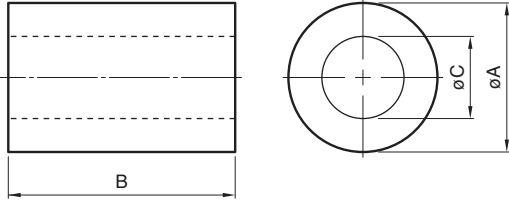
- RoHS Directive Compliant Product: See the following for more details.<https://product.tdk.com/info/en/environment/rohs/index.html>
- Halogen-free: Indicates that Cl content is less than 900ppm, Br content is less than 900ppm, and that the total Cl and Br content is less than 1500ppm.

 Please be sure to request delivery specifications that provide further details on the features and specifications of the products for proper and safe use. Please note that the contents may change without any prior notice due to reasons such as upgrading.

Ni-Zn RH series




SHAPES AND DIMENSIONS



| | | | | | | | |
|-----------------|-------------------|-------------------------------------|---|----------------------------|---|-------------------------------------|----------------------|
| HF70 | RH | 7 | x | 8 | x | 4 | □□□□ |
| Material | Core shape | Outer diameter dimensions(A) | | Width dimensions(B) | | Inner diameter dimensions(C) | Internal code |

| Part No. | Dimensions | | | Electrical characteristics | |
|----------------------|------------|-----------|-------------|--|--------|
| | A (mm) | B | C | Impedance Z typ. (Ω) 23°C 10MHz | 100MHz |
| HF70RH7X8X4 | 7.0±0.3 | 8.0±0.3 | 4.0±0.2 | 28 | 49 |
| HF70RH7X14X4 | 7.0±0.3 | 14.0±0.5 | 4.0±0.2 | 52 | 85 |
| HF70RH8X8X4 | 8.0±0.2 | 8.0±0.2 | 4.0±0.2 | 39 | 63 |
| HF70RH8X9X4 | 8.0±0.2 | 9.0±0.3 | 4.0±0.2 | 44 | 72 |
| HF70RH8X15X4 | 8.0±0.3 | 15.0±0.4 | 4.0±0.25 | 70 | 113 |
| HF70RH8X20X4 | 8.0±0.3 | 20.0±0.5 | 4.0±0.25 | 92 | 151 |
| HF70RH10X20X5 | 10.0±0.3 | 20.0±0.5 | 5.0±0.2 | 81 | 154 |
| HF70RH12X15X7.3 | 12.0±0.3 | 15.0±0.5 | 7.3±0.2 | 44 | 83 |
| HF70RH12.3X20X7 | 12.3±0.3 | 20.0±0.5 | 7.0±0.2 | 75 | 124 |
| HF70RH13X20X5 | 13.0±0.3 | 20.0±0.5 | 5.0±0.2, -0 | 127 | 210 |
| HF70RH14X14X10 | 14.0±0.3 | 14.0±0.3 | 10.0±0.25 | 33 | 60 |
| HF70RH14.3X14.3X6.35 | 14.3±0.3 | 14.3±0.3 | 6.35±0.2 | 70 | 130 |
| HF70RH14.3X28.6X6.35 | 14.3±0.3 | 28.6±1.0 | 6.35±0.2 | 125 | 210 |
| HF70RH14X28X8 | 14.0±0.5 | 28.0±1.0 | 8.0±0.5 | 110 | 185 |
| HF70RH16X12X9.1 | 16.0±0.3 | 12.0±0.4 | 9.1±0.3, -0 | 45 | 74 |
| HF70RH16X15X9 | 16.0±0.3 | 15.0±0.4 | 9.0±0.2 | 46 | 103 |
| HF70RH16X17X9 | 16.0±0.5 | 17.0±0.5 | 9.0±0.5 | 60 | 120 |
| HF70RH16X28X9 | 16.0±0.5 | 28.0±1.0 | 9.0±0.5 | 100 | 185 |
| HF70RH16X28X10 | 16.0±0.3 | 28.0±0.7 | 10.0±0.25 | 70 | 130 |
| HF70RH17.4X28.57X9.5 | 17.4±0.5 | 28.57±1.0 | 9.5±0.5 | 90 | 200 |
| HF70RH19X29X13 | 19.0±0.5 | 29.0±1.0 | 13.0±0.5 | 80 | 145 |
| HF70RH26X29X13 | 26.0±0.5 | 29.0±1.0 | 13.0±0.5 | 145 | 220 |

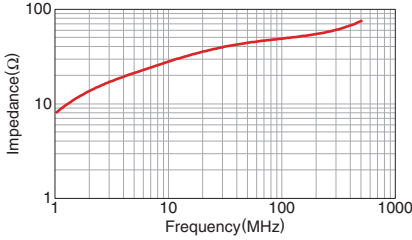
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Ni-Zn RH series

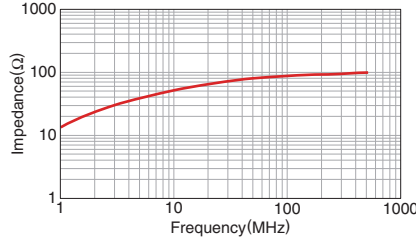
ELECTRICAL CHARACTERISTICS

IMPEDANCE VS. FREQUENCY CHARACTERISTICS

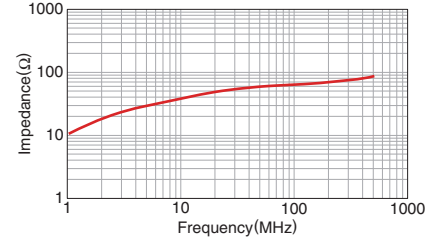
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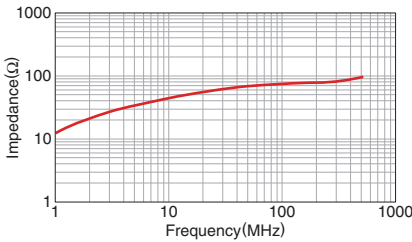
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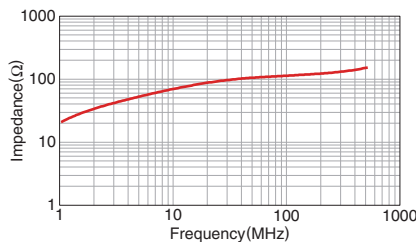
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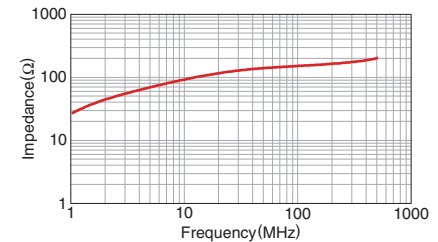
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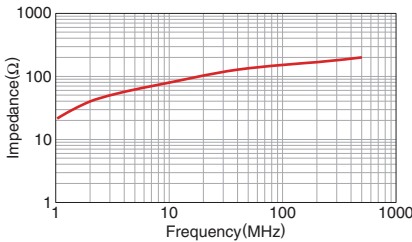
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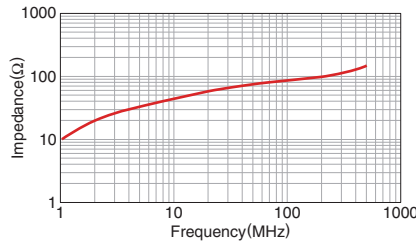
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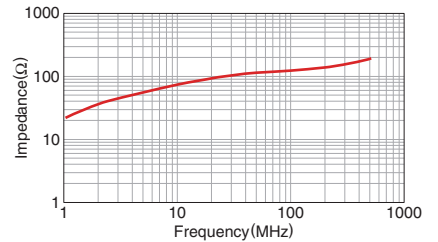
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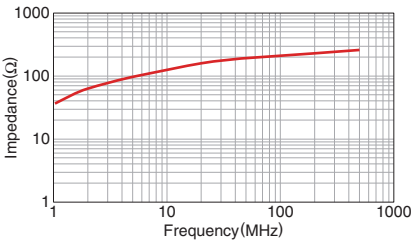
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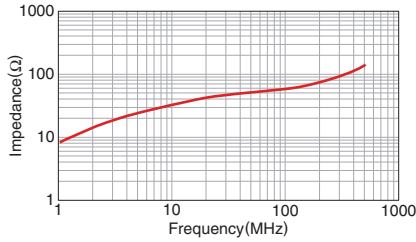
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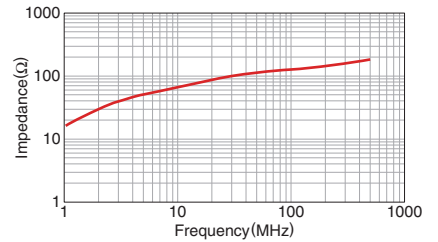
HF70RH13X20X5



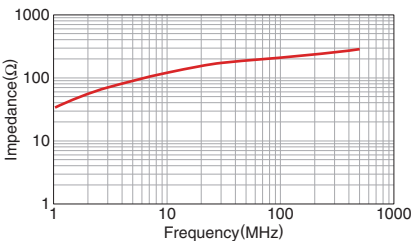
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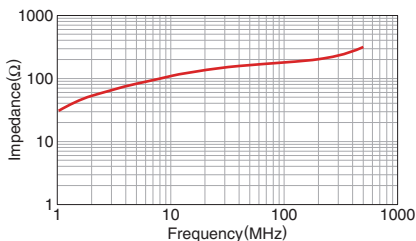
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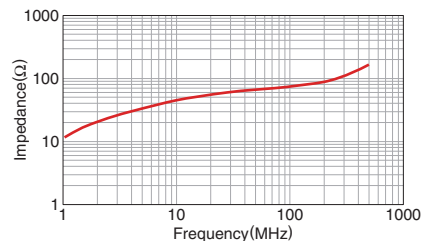
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HF70RH14X28X8



HF70RH16X12X9.1



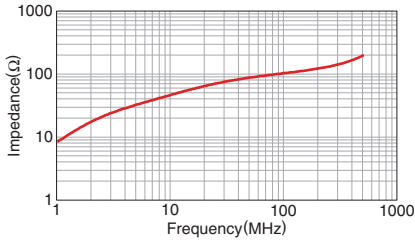
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Ni-Zn RH series

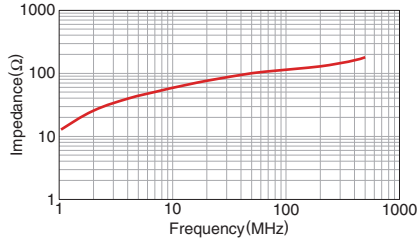
ELECTRICAL CHARACTERISTICS

IMPEDANCE VS. FREQUENCY CHARACTERISTICS

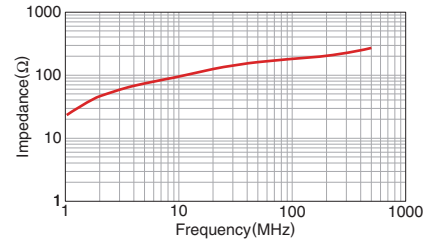
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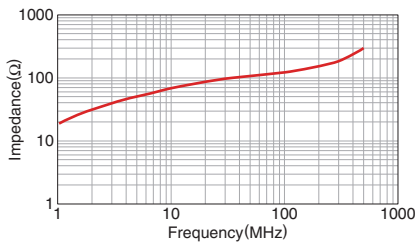
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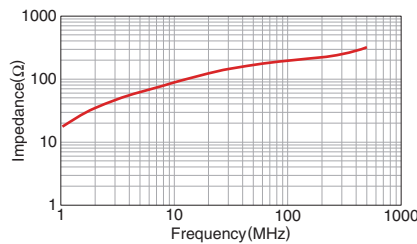
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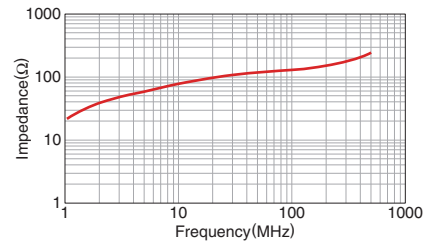
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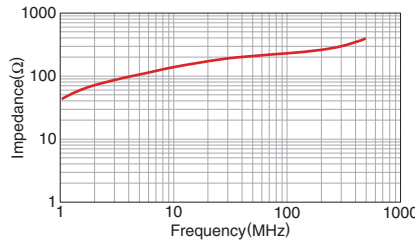
HF70RH17.4X28.57X9.5




HF70RH19X29X13



HF70RH26X29X13



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Ni-Zn RU series



SHAPES AND DIMENSIONS

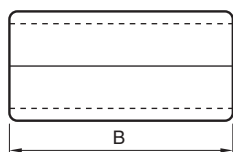


Fig.1

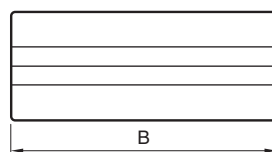
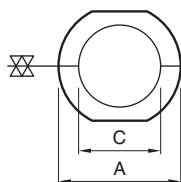
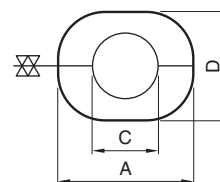


Fig.2



| | | | | | | | |
|----------|------------|------------------------------|---|----------------------|---|------------------------------|---------------|
| HF70 | RU | 10 | x | 20 | x | 5 | □□□□ |
| Material | Core shape | Outer diameter dimensions(A) | | Length dimensions(B) | | Inner diameter dimensions(C) | Internal code |

| Part No. | Dimensions | | | | Electrical characteristics | | SHAPES |
|------------------|------------|----|-----|----|---|--------|--------|
| | A (mm) | B | C | D | Impedance Z typ. (Ω) 23°C 10MHz | 100MHz | |
| HF70RU10X20X5S | 10 | 20 | 5 | 9 | 81 | 145 | Fig.2 |
| HF70RU12X15X7.3S | 12 | 15 | 7.3 | — | 31 | 82 | Fig.1 |
| HF70RU13X22X7S | 13 | 22 | 7 | 12 | 81 | 144 | Fig.2 |
| HF70RU16X28X9S | 16 | 28 | 9 | — | 78 | 170 | Fig.1 |
| HF70RU17X28X11S | 17 | 28 | 11 | 16 | 77 | 141 | Fig.2 |
| HF70RU26X29X13S | 26 | 29 | 13 | — | 120 | 245 | Fig.1 |

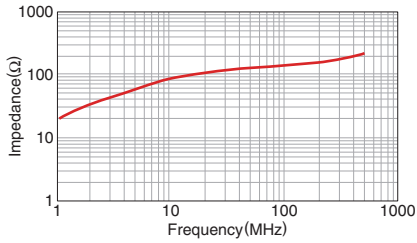
* The RU core is delivered 2 pieces/set. It is possible to offer in single unit.

Ni-Zn RU series

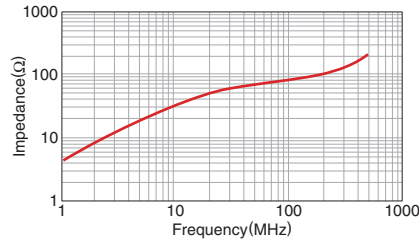
ELECTRICAL CHARACTERISTICS

IMPEDANCE VS. FREQUENCY CHARACTERISTICS

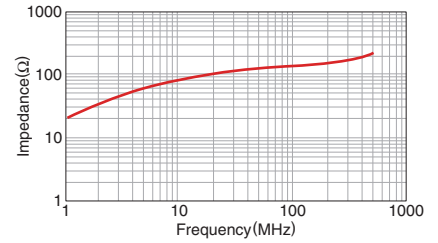
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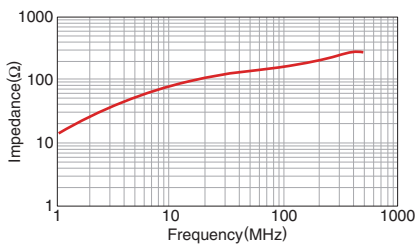
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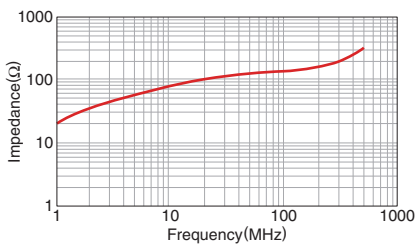
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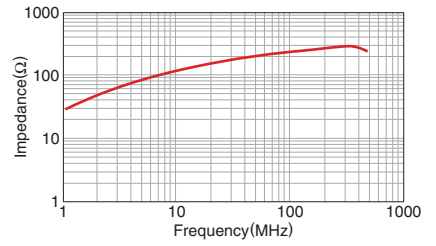
HF70RU16X28X9S




HF70RU17X28X11S



HF70RU26X29X13S



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