Data Sheet

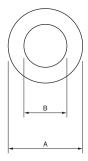
Ferrite Cores for EMI Suppression Ring Core

FSRB Series

Appearance

■ Dim. illustration







■ Features

- 1. Ease of use and excellent noise suppression-data lines can be passed through the core or wound around several times.
- 2. Effective for suppressing noise at high frequencies.

Applications

- 1. For data-processing equipment (PC, PDA, game machine, etc.), and peripheral equipment (printer, HDD, display, etc.)
- 2. For digital equipment (DSC, DVC, DVD recorder, mobile phone, digital audio, optical drive, PDP/LCD/FED, facsimile, etc.)

■ Rated Value

Part Number	A : Outer Dimension	B : Inner Dimension	H : Length Dimension	Impedance at 100MHz (3 turns)	Note
FSRB041020RNB00B	3.6mm ±0.15mm	1.0mm ±0.15mm	2.0mm ±0.2mm	267ohm (typ.)	-
FSRB044020RNB00B	3.6mm ±0.15mm	1.5mm ±0.15mm	2.0mm ±0.15mm	178ohm (typ.)	-
FSRB060040RNB00B	5.5mm ±0.2mm	2.7mm ±0.2mm	4.0mm ±0.3mm	290ohm (typ.)	-
FSRB071040RNB00B	7.0mm ±0.3mm	4.0mm ±0.2mm	4.0mm ±0.2mm	222ohm (typ.)	-
FSRB090060RNB00B	9.0mm ±0.3mm	5.0mm ±0.3mm	6.0mm ±0.5mm	356ohm (typ.)	For USB/IEEE1394
FSRB090080RNB00B	9.0mm ±0.3mm	5.0mm ±0.3mm	8.0mm ±0.5mm	466ohm (typ.)	For USB/IEEE1394
FSRB091060RNB00B	9.0mm ±0.3mm	4.3mm ±0.2mm	6.0mm ±0.5mm	451ohm (typ.)	For USB/IEEE1394
FSRB091080RNB00B	9.0mm ±0.3mm	4.3mm ±0.2mm	8.0mm ±0.5mm	582ohm (typ.)	For USB/IEEE1394
FSRB100030RTB00B	10.0mm ±0.3mm	6.0mm ±0.2mm	3.0mm ±0.3mm	170ohm (typ.)	For USB/IEEE1394
FSRB100060RTB00B	10.0mm ±0.3mm	6.0mm ±0.2mm	6.0mm ±0.5mm	316ohm (typ.)	For USB/IEEE1394
FSRB100080RTB00B	10.0mm ±0.3mm	6.0mm ±0.2mm	8.0mm ±0.5mm	388ohm (typ.)	For USB/IEEE1394
FSRB100100RTB00B	10.0mm ±0.3mm	6.0mm ±0.2mm	10.0mm ±0.5mm	475ohm (typ.)	For USB/IEEE1394

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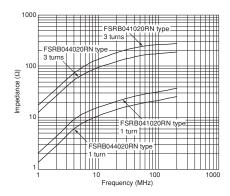
Note:

- 1. This datasheet is downloaded from the website of Murata Manufacturing co., Itd. Therefore, it's specifications are subject to change or our products in it may be discontinued without advance notice. Please check with our sales representatives or product engineers before ordering.
- 2. This datasheet has only typical specifications because there is no space for detailed specifications. Therefore, please approve our product specifications or transact the approval sheet for product specifications before ordering.

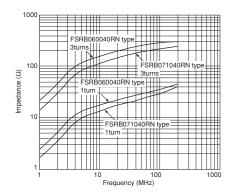
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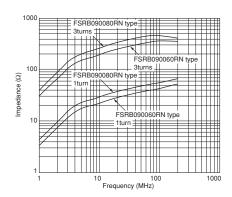
■ Impedance Frequency Characteristics FSRB041/FSRB044



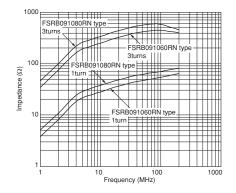
■ Impedance Frequency Characteristics FSRB060/FSRB071



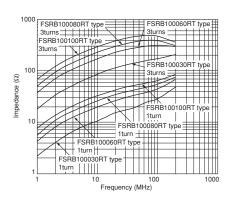
■ Impedance Frequency Characteristics FSRB090



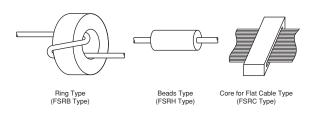
■ Impedance Frequency Characteristics FSRB091



■ Impedance Frequency Characteristics FSRB100



Cases to Use



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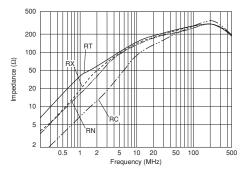
■ Data/Notice

■ Standard Characteristics of Ferrite Materials

Material	μi	Bs (mT)	Tc (°C)	ρ (Ω-m)
RT	1600	290	≧110	>10 ⁵
RX	750	330	≧110	>10 ⁵
RN	550	310	≧130	>105
RC	250	320	≧140	>105

Size of Ferrite Core (30ø - 20ø - 6)

■ Ferrite Material Comparison



Size of Ferrite Core (30ø -20ø -6)

3

■ Notice (Storage and Operating Condition)

This product is designed for use in the following environment:

FSRH/FSRB/FSRC

Operating Temperature: -25 to 85°C Storage Temperature: -25 to 125°C

FSSA S

Operating Temperature: -25 to 85°C Storage Temperature: -25 to 85°C

Do not use in the following environments or under

the following conditions:

- 1. Ambient air containing corrosive gas (Chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxide gas, etc.)
- 2. In liquid
- 3. Other environments similar to 1 through 2

■ Notice (Handling)

- 1. Protect product from damage that may occur in transit such as cracking of the core.
- 2. Handle product with care. Do not drop or throw.
- 3. Do not apply excessive force to the product.

FSSA S Storage:

Store in manufacturer's package or tightly re-closed box with following conditions.

Temperature: -10 to +35°C Humidity: 15 to 85% RH

Use this product within 6 months after receipt. Storage in high temperature, high humidity or quick temperature change will damage the function of the tape.

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