Data Sheet

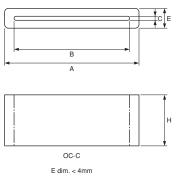
Ferrite Cores for EMI Suppression Flat Cables

Thin Type FSRC Series

■ Appearance



■ Dim. illustration



■ Features

Murata offers a wide variety of thin type small set cores providing solutions for many requirements.

The flat ribbon cable core series has a thickness of less than 4mm, due to the core set becoming smaller and more lightweight.

The ultra-thin type core series is less than 2mm thick, making it suitable to meet various requirements.
When you require a thinner core, please choose "Thin Type Sandwich Core."

Applications

- For data-processing equipment (PC, PDA, game machine, etc.), and peripheral equipment (printer, HDD, display, etc.)
- 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 | E: Width Dimension | C : Gap Dimension | Impedance at 100MHz | Number of Turn | Note |
|------------------|---------------------|---------------------|----------------------|--------------------|-------------------|---------------------|----------------|-----------|
| FSRC080090RTB00B | 8.0mm ±0.3mm | 6.0mm ±0.25mm | 9.0mm ±0.25mm | 2.7mm ±0.3mm | 0.7mm ±0.25mm | 51ohm (typ.) | 1 | Thin Type |
| FSRC080120RTB00B | 8.0mm ±0.3mm | 6.0mm ±0.25mm | 12.0mm ±0.25mm | 2.7mm ±0.3mm | 0.7mm ±0.25mm | 63ohm (typ.) | 1 | Thin Type |
| FSRC120120RXB00B | 11.5mm ±0.5mm | 8.0mm ±0.25mm | 12.0mm ±0.25mm | 3.0mm ±0.25mm | 0.7mm ±0.25mm | 59ohm (typ.) | 1 | Thin Type |
| FSRC171060RTB00T | 17.0mm ±0.4mm | 13.6mm ±0.4mm | 6.0mm ±0.4mm | 2.8mm ±0.4mm | 0.7mm ±0.3mm | 37ohm (typ.) | 1 | Thin Type |
| FSRC171090RTB00T | 17.0mm ±0.4mm | 13.6mm ±0.4mm | 9.0mm ±0.4mm | 2.8mm ±0.4mm | 0.7mm ±0.3mm | 44ohm (typ.) | 1 | Thin Type |
| FSRC171120RTB00T | 17.0mm ±0.4mm | 13.6mm ±0.4mm | 12.0mm ±0.4mm | 2.8mm ±0.4mm | 0.7mm ±0.3mm | 53ohm (typ.) | 1 | Thin Type |
| FSRC222060RX000T | 22.8mm ±0.5mm | 18.7mm ±0.5mm | 6.0mm ±0.4mm | 2.8mm ±0.4mm | 0.7mm ±0.3mm | 37ohm (typ.) | 1 | Thin Type |
| FSRC222090RX000T | 22.8mm ±0.5mm | 18.7mm ±0.5mm | 9.0mm ±0.4mm | 2.8mm ±0.4mm | 0.7mm ±0.3mm | 46ohm (typ.) | 1 | Thin Type |
| FSRC222120RX000T | 22.8mm ±0.5mm | 18.7mm ±0.5mm | 12.0mm ±0.4mm | 2.8mm ±0.4mm | 0.7mm ±0.3mm | 53ohm (typ.) | 1 | Thin Type |

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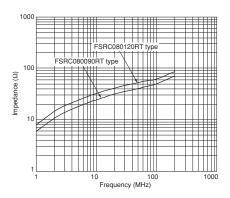
⚠Note:

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- 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.

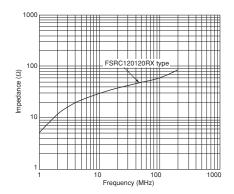
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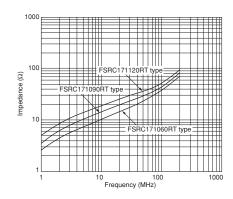
■ Impedance Frequency Characteristics FSRC080



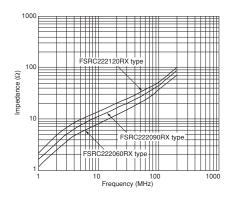
■ Impedance Frequency Characteristics FSRC120



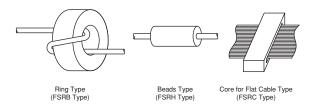
■ Impedance Frequency Characteristics FSRC171



■ Impedance Frequency Characteristics FSRC222



Cases to Use



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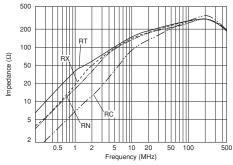
■ Data/Notice

■ 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 | >10 ⁵ |
| RC | 250 | 320 | ≧140 | >105 |

Size of Ferrite Core (30ø - 20ø - 6)

■ Ferrite Material Comparison



Size of Ferrite Core (30ø -20ø -6)

■ 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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