

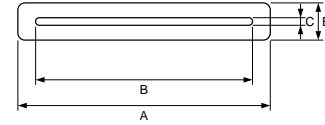
Ferrite Cores for EMI Suppression Flat Cables

Thin Type FSRC Series

■ Appearance



■ Dim. illustration



OC-C

E dim. < 4mm

■ 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 has less than 2mm thickness, which is more suitable when meeting various requirements.

In case of requiring thinner core, please choose "Thin Type Sandwich Core".

Murata can also supply Resin coated core which is shatter-proof with continuous noise removal functionality.

Please ask us about the resin coated core, if necessary.

■ Applications

- For Data-processing equipment (PC, PDA, Game machine, etc.), and peripheral equipments (Printer, FDD, HDD, Display, etc.)
- For digital equipments (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
FSRC080030RTB00B	8.0mm±0.3mm	6.0mm±0.25mm	3.0mm±0.25mm	2.7mm±0.3mm	0.7mm±0.25mm	28ohm(typ.)	1	Thin Type
FSRC080060RTB00B	8.0mm±0.3mm	6.0mm±0.25mm	6.0mm±0.25mm	2.7mm±0.3mm	0.7mm±0.25mm	39ohm(typ.)	1	Thin Type
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


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Part Number	A : Outer Dimension	B : Inner Dimension	H : Length Dimension	E : Width Dimension	C : Gap Dimension	Impedance at 100MHz	Number of Turn	Note
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
FSRC100030RTB00B	10.0mm±0.4mm	8.0mm±0.4mm	3.0mm+0.15mm/-0.30mm	1.85mm+0.15mm/-0.30mm	0.7mm±0.4mm	24ohm(typ.)	1	Ultra Thin Type
FSRC100040RTB00B	10.0mm±0.4mm	8.0mm±0.4mm	4.0mm+0.15mm/-0.30mm	1.85mm+0.15mm/-0.30mm	0.7mm±0.4mm	25ohm(typ.)	1	Ultra Thin Type
FSRC100050RTB00B	10.0mm±0.4mm	8.0mm±0.4mm	5.0mm+0.15mm/-0.30mm	1.85mm+0.15mm/-0.30mm	0.7mm±0.4mm	27ohm(typ.)	1	Ultra Thin Type
FSRC100060RTB00B	10.0mm±0.4mm	8.0mm±0.4mm	6.0mm+0.15mm/-0.30mm	1.85mm+0.15mm/-0.30mm	0.7mm±0.4mm	30ohm(typ.)	1	Ultra Thin Type
FSRC120020RXB00B	11.5mm±0.5mm	8.0mm±0.25mm	2.0mm±0.25mm	3.0mm±0.25mm	0.7mm±0.25mm	24ohm(typ.)	1	Thin Type
FSRC120050RXB00B	11.5mm±0.5mm	8.0mm±0.25mm	5.0mm±0.25mm	3.0mm±0.25mm	0.7mm±0.25mm	35ohm(typ.)	1	Thin Type
FSRC120060RXB00B	11.5mm±0.5mm	8.0mm±0.25mm	6.0mm±0.25mm	3.0mm±0.25mm	0.7mm±0.25mm	36ohm(typ.)	1	Thin Type
FSRC120090RXB00B	11.5mm±0.5mm	8.0mm±0.25mm	9.0mm±0.25mm	3.0mm±0.25mm	0.7mm±0.25mm	48ohm(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
FSRC150030RTB00B	15.6mm±0.4mm	13.6mm±0.4mm	3.0mm+0.15mm/-0.30mm	1.85mm+0.15mm/-0.30mm	0.7mm±0.4mm	25ohm(typ.)	1	Ultra Thin Type
FSRC150040RTB00B	15.6mm±0.4mm	13.6mm±0.4mm	4.0mm+0.15mm/-0.30mm	1.85mm+0.15mm/-0.30mm	0.7mm±0.4mm	28ohm(typ.)	1	Ultra Thin Type
FSRC150050RTB00B	15.6mm±0.4mm	13.6mm±0.4mm	5.0mm+0.15mm/-0.30mm	1.85mm+0.15mm/-0.30mm	0.7mm±0.4mm	29ohm(typ.)	1	Ultra Thin Type
FSRC150060RTB00B	15.6mm±0.4mm	13.6mm±0.4mm	6.0mm+0.15mm/-0.30mm	1.85mm+0.15mm/-0.30mm	0.7mm±0.4mm	30ohm(typ.)	1	Ultra Thin Type
FSRC160040RTB00T	15.6mm±0.4mm	13.6mm±0.4mm	4.0mm±0.3mm	2.8mm±0.3mm	0.7mm±0.4mm	26ohm(typ.)	1	Thin Type
FSRC171030RTB00T	17.0mm±0.4mm	13.6mm±0.4mm	3.0mm±0.3mm	2.8mm±0.4mm	0.7mm±0.4mm	26ohm(typ.)	1	Thin Type
FSRC171060RTB00T	17.0mm±0.4mm	13.6mm±0.4mm	6.0mm±0.3mm	2.8mm±0.4mm	0.7mm±0.4mm	37ohm(typ.)	1	Thin Type
FSRC171090RTB00T	17.0mm±0.4mm	13.6mm±0.4mm	9.0mm±0.3mm	2.8mm±0.4mm	0.7mm±0.4mm	44ohm(typ.)	1	Thin Type
FSRC171120RTB00T	17.0mm±0.4mm	13.6mm±0.4mm	12.0mm±0.3mm	2.8mm±0.4mm	0.7mm±0.4mm	53ohm(typ.)	1	Thin Type
FSRC200120RTB00T	20.0mm±0.5mm	16.0mm±0.5mm	12.0mm±0.4mm	3.0mm±0.4mm	0.8mm±0.4mm	60ohm(typ.)	1	Thin Type
FSRC222060RX000T	22.8mm±0.5mm	18.7mm±0.5mm	6.0mm±0.3mm	2.8mm±0.4mm	0.7mm±0.4mm	37ohm(typ.)	1	Thin Type
FSRC222090RX000T	22.8mm±0.5mm	18.7mm±0.5mm	9.0mm±0.3mm	2.8mm±0.4mm	0.7mm±0.4mm	46ohm(typ.)	1	Thin Type
FSRC222120RX000T	22.8mm±0.5mm	18.7mm±0.5mm	12.0mm±0.3mm	2.8mm±0.4mm	0.7mm±0.4mm	53ohm(typ.)	1	Thin Type
FSRC230060RTB00T	22.7mm±0.4mm	20.6mm±0.4mm	6.0mm+0.25mm/-0.20mm	1.75mm+0.25mm/-0.20mm	0.6mm±0.4mm	33ohm(typ.)	1	Ultra Thin Type
FSRC230090RTB00T	22.7mm±0.4mm	20.6mm±0.4mm	9.0mm+0.25mm/-0.20mm	1.75mm+0.25mm/-0.20mm	0.6mm±0.4mm	39ohm(typ.)	1	Ultra Thin Type
FSRC253060RT000T	25.0mm±0.5mm	21.0mm±0.5mm	6.0mm±0.4mm	3.0mm±0.4mm	0.8mm±0.4mm	41ohm(typ.)	1	Thin Type
FSRC253090RT000T	25.0mm±0.5mm	21.0mm±0.5mm	9.0mm±0.4mm	3.0mm±0.4mm	0.8mm±0.4mm	48ohm(typ.)	1	Thin Type
FSRC253120RT000T	25.0mm±0.5mm	21.0mm±0.5mm	12.0mm±0.4mm	3.0mm±0.4mm	0.8mm±0.4mm	56ohm(typ.)	1	Thin Type
FSRC280060RX000T	28.0mm±0.5mm	24.0mm±0.5mm	6.0mm±0.35mm	3.5mm±0.4mm	0.8mm±0.4mm	39ohm(typ.)	1	Thin Type
FSRC280090RX000T	28.0mm±0.5mm	24.0mm±0.5mm	9.0mm±0.35mm	3.5mm±0.4mm	0.8mm±0.4mm	46ohm(typ.)	1	Thin Type
FSRC280120RX000T	28.0mm±0.5mm	24.0mm±0.5mm	12.0mm±0.35mm	3.5mm±0.4mm	0.8mm±0.4mm	56ohm(typ.)	1	Thin Type
FSRC360060RX000T	36.0mm±0.5mm	32.0mm±0.5mm	6.0mm±0.35mm	3.5mm±0.4mm	0.8mm±0.4mm	40ohm(typ.)	1	Thin Type
FSRC360090RX000T	36.0mm±0.5mm	32.0mm±0.5mm	9.0mm±0.35mm	3.5mm±0.4mm	0.8mm±0.4mm	47ohm(typ.)	1	Thin Type
FSRC360120RX000T	36.0mm±0.5mm	32.0mm±0.5mm	12.0mm±0.35mm	3.5mm±0.4mm	0.8mm±0.4mm	56ohm(typ.)	1	Thin Type
FSRC420060RX000T	42.0mm±0.5mm	38.0mm±0.5mm	6.0mm±0.35mm	2.8mm±0.4mm	0.7mm±0.4mm	42ohm(typ.)	1	Thin Type
FSRC420090RX000T	42.0mm±0.5mm	38.0mm±0.5mm	9.0mm±0.35mm	2.8mm±0.4mm	0.7mm±0.4mm	48ohm(typ.)	1	Thin Type
FSRC420120RX000T	42.0mm±0.5mm	38.0mm±0.5mm	12.0mm±0.35mm	2.8mm±0.4mm	0.7mm±0.4mm	57ohm(typ.)	1	Thin Type

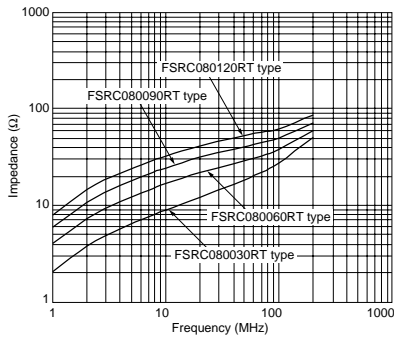
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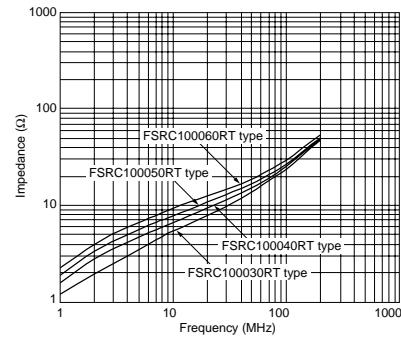
Impedance Frequency Characteristics

FSRC080



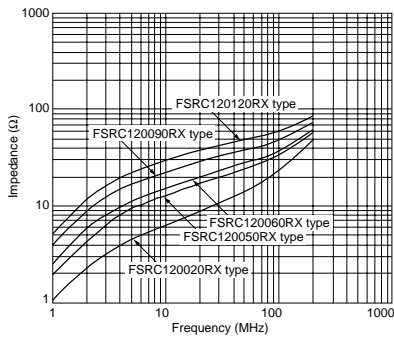
Impedance Frequency Characteristics

FSRC100



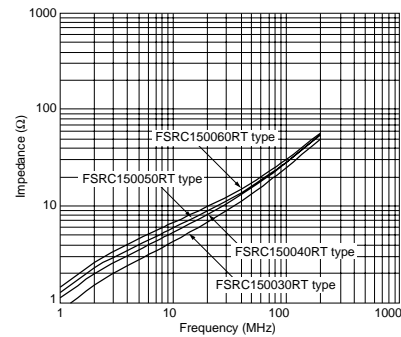
Impedance Frequency Characteristics

FSRC120



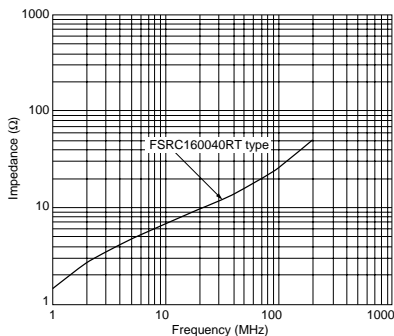
Impedance Frequency Characteristics

FSRC150



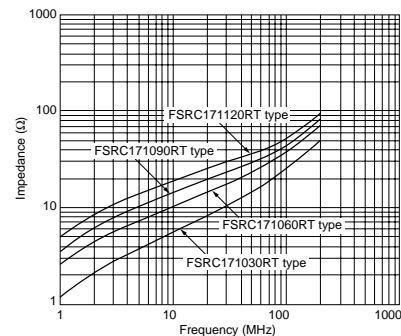
Impedance Frequency Characteristics

FSRC160



Impedance Frequency Characteristics

FSRC171



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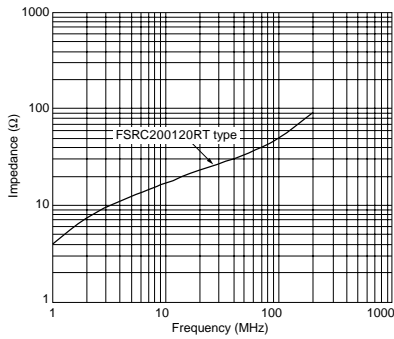
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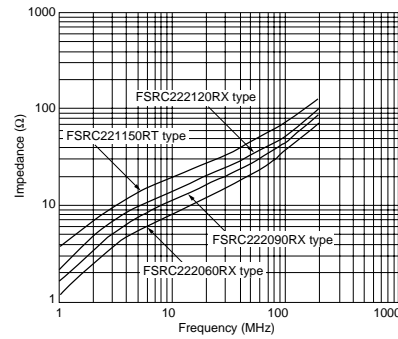
Impedance Frequency Characteristics

FSRC200



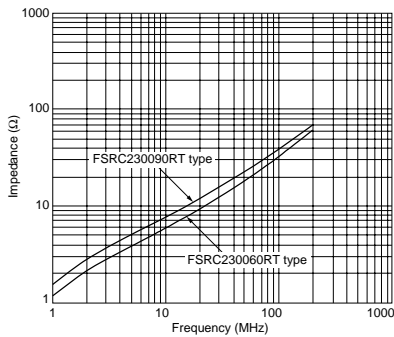
Impedance Frequency Characteristics

FSRC222



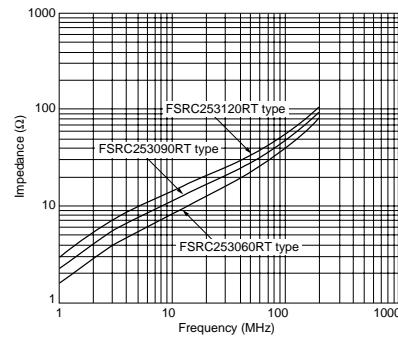
Impedance Frequency Characteristics

FSRC230



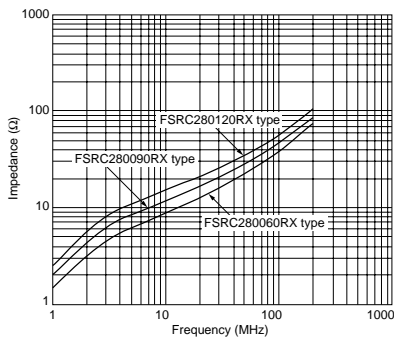
Impedance Frequency Characteristics

FSRC253



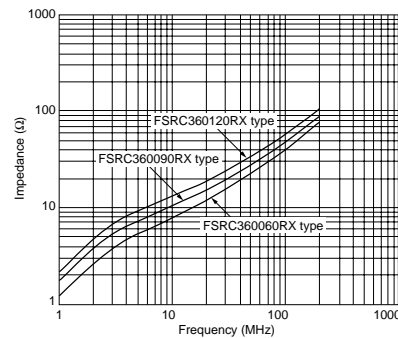
Impedance Frequency Characteristics

FSRC280



Impedance Frequency Characteristics

FSRC360



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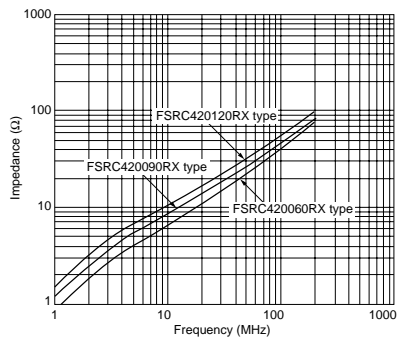
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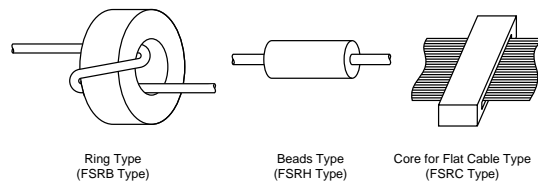
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Impedance Frequency Characteristics

FSRC420



Cases to Use



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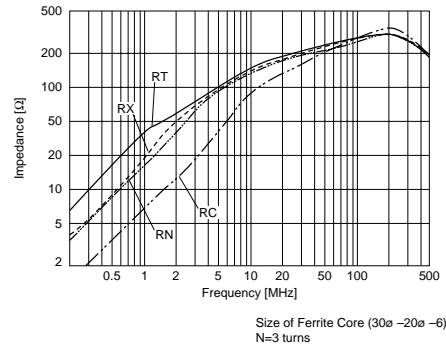
■ Data/Notice

■ Standard Characteristics of Ferrite Materials

Material	μ i	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	$>10^5$

Size of ferrite core (30 ϕ - 20 ϕ - 6)

■ Ferrite Material Comparison



■ Notice (Storage and Operating Condition)

This product is designed for use in the following environment.

FSRH/FSRB/FSRC/FSMA/FSSA_T

Operating Temperature: -25 to 85 degrees C

Storage Temperature: -25 to 125 degrees C

FSSA_S

Operating Temperature: -25 to 85 degrees C

Storage Temperature: -25 to 85 degrees 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 core.
2. Handle product with care. Do not drop and throw.
3. Do not apply excessive force to the product.

FSSA_S Storage

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

Temperature: -10 to +35 degrees C

Humidity: 15 to 85% RH

Use this product within 6 months after receipt.

The storage in high temperature, high humidity or quick temperature change will damage to the function of tape.

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