FERRITE CORE FOR EMI SUPPRESSION

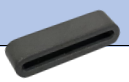
Flat series

StricTron

Strictron Electronics Limited

S02-AN04-F01

Ferrite core for EMI suppression



General notices

- The described product is designed for general use only, using in safety-critical, high-reliability or particular applications shall be pre-evaluated by customer.
- Strictron products are unilaterally subject to Strictron standards and are also compliant with common industry standards, demand or expectation from customer side is not warranted.
- Independent reliability of the described product is ensured by Strictron, risks or losses arising during or after particularly or unnormally applying the product, as well as arising from the finished module or product installed the described products, are always beyond the responsibility of Strictron.
- Please conduct validation and verification in actual condition of mounting and operating environment before widely use the described product in mass production.

Product introduction

Ferrite core mainly includes nickel zinc ferrite core and manganese zinc ferrite core. Nickel zinc ferrite core is suitable for suppressing electromagnetic interference in high frequency band. It has different impedance characteristics at different frequencies. Generally, the impedance is very small at low frequency points. When the frequency increases, the impedance of the it goes up sharply.

Ferrite core model slection:

For ferrite core made from same material, at same frequency condition, the larger difference between inner and outer diameter is, and the longer the ferrite core body is, the higher impedance of the ferrite core is.

To make full use of the ferrite core performance, try to choose close inner diameter as per the conduct wire diameter so that the core can tightly wrap the wire, and to choose longer ferrite core body height to get better filtering effect.

Main strengths of ferrite core:

- It's convenient that it can be directly sleeved on the cable which needs filtering.
- Unlike other filtering methods, grounding is not required for ferrite core, so there are no special requirements for structural design and circuit board design.
- When it's used as a common mode choke, it will not cause signal distortion, which is very essential for wires transmitting high-frequency signals.

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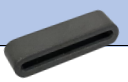
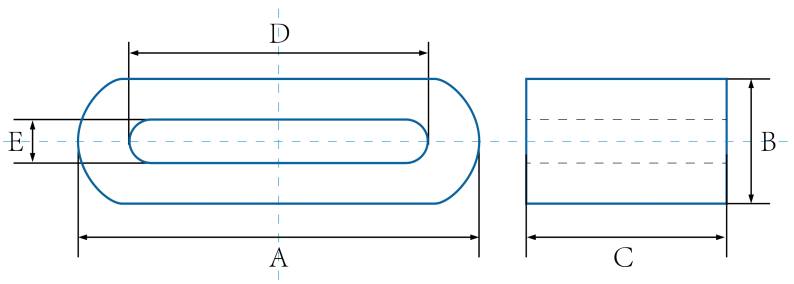


Part number naming rules

AN**	F	A * B * C	-	D * E
Category	Flat series	Exterior(length*width*height)		Interior hole(length*width)

Drawing and dimension marks

Physical photo	Planar graph
Eg: 	
Interior hole width ranges from 0.7mm to 11mm.	
Interior hole length ranges from 3mm to 55mm.	

Remark:

The product lineup down below is for general choices, non-mentioned sizes and different material types are available as per demands. The listed information in the sheets hereinafter are for reference only. Should you not find what you need here, get in touch with us for further inquiries.

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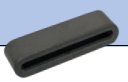

Product parameter lineup

F - Flat series

Part code	A (mm) Length	B (mm) Width	C (mm) Height	D (mm) Hole length	E (mm) Hole width
F 7*4*3-5*1.9	7±0.5	4±0.4	3±0.3	5±0.5	1.9±0.5
F 7*4*8-5*1.9	7±0.5	4±0.4	8±0.6	5±0.5	1.9±0.5
F 7.5*5.3*12-5*2.8	7.5±0.5	5.3±0.5	12±0.8	5±0.5	2.8±0.5
F 9.1*5.6*5-7.2*3.7	9.1±0.5	5.6±0.5	5±0.4	7.2±0.5	3.7±0.6
F 9.1*5.6*7.8-7.2*3.7	9.1±0.5	5.6±0.5	7.8±0.5	7.2±0.5	3.7±0.6
F 13.5*2.8*15-11*0.7	13.5±0.6	2.8±0.3	15±0.8	11±0.6	0.7±0.3
F 15.6*2.8*4-13.6*0.7	15.6±0.7	2.8±0.3	4±0.4	13.6±0.6	0.7±0.3
F 16*5*8-11.5*0.8	16±0.7	5±0.4	8±0.6	11.5±0.6	0.8±0.4
F 19*6.5*8-14.2*1.3	19±0.8	6.5±0.5	8±0.6	14.2±0.7	1.3±0.5
F 19*6.5*10-13.7*1.3	19±0.8	6.5±0.5	10±0.6	13.7±0.6	1.3±0.5
F 23.3*3*6-20*0.9	23.3±1.0	3±0.3	6±0.5	20±0.8	0.9±0.4
F 23.3*3*12-20*0.9	23.3±1.0	3±0.3	12±0.8	20±0.8	0.9±0.4
F 23.6*6.5*15-18*1.3	23.6±1.0	6.5±0.5	15±0.8	18±0.8	1.3±0.5
F 24.5*5*4-20*0.8	24.5±1.0	5±0.4	4±0.4	20±0.8	0.8±0.4
F 24.5*5*7-20*0.8	24.5±1.0	5±0.4	7±0.5	20±0.8	0.8±0.4
F 24.5*5*12-20*0.8	24.5±1.0	5±0.4	12±0.8	20±0.8	0.8±0.4
F 24.5*5*20-20*0.8	24.5±1.0	5±0.4	20±1.0	20±0.8	0.8±0.4
F 25*5*12-21*1.35	25±1.0	5±0.4	12±0.8	21±0.8	1.35±0.5
F 25*5*15-21*1.35	25±1.0	5±0.4	15±0.8	21±0.8	1.35±0.5
F 26.5*5*10-22*1.2	26.5±1.0	5±0.4	10±0.8	22±0.8	1.2±0.5
F 28.5*6.5*8-23.5*1	28.5±1.0	6.5±0.5	8±0.6	23.5±0.8	1±0.5
F 28.5*6.5*15-23.5*1	28.5±1.0	6.5±0.5	15±0.8	23.5±0.8	1±0.5

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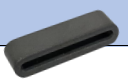

Product parameter lineup

F - Flat series

Part code	A (mm) Length	B (mm) Width	C (mm) Height	D (mm) Hole length	E (mm) Hole width
F 28.5*6.5*18-23.5*1	28.5±1.0	6.5±0.5	18±0.8	23.5±0.8	1±0.5
F 29*8*10-22*2	29±1.0	8±0.6	10±0.8	22±0.8	2±0.5
F 29*8*12-22*2	29±1.0	8±0.6	12±0.8	22±0.8	2±0.5
F 31*5*20-27*0.8	31±1.2	5±0.4	20±1.0	27±1.0	0.8±0.4
F 32*6.5*9.5-28*2.75	32±1.2	6.5±0.5	9.5±0.6	28±1.0	2.75±0.5
F 32*6.5*12-28*2.75	32±1.2	6.5±0.5	12±0.8	28±1.0	2.75±0.5
F 32*6.5*20-28*2.75	32±1.2	6.5±0.5	20±1.0	28±1.0	2.75±0.5
F 33.5*6.5*6-27*1.3	33.5±1.2	6.5±0.5	6±0.5	27±1.0	1.3±0.5
F 33.5*6.5*15-27*1.5	33.5±1.2	6.5±0.5	15±0.8	27±1.0	1.5±0.5
F 33.5*6.5*20-27*1.3	33.5±1.2	6.5±0.5	20±1.0	27±1.0	1.3±0.5
F 37*15.3*12.8-32*11	37±1.2	15.3±0.8	12.8±0.8	32±1.0	11±1.0
F 38.5*4*12-35*0.8	38.5±1.2	4±0.4	12±0.8	35±1.2	0.8±0.4
F 40*6.5*8-35*1.3	40±1.5	6.5±0.5	8±0.6	35±1.2	1.3±0.5
F 40*6.5*15-35*1.3	40±1.5	6.5±0.5	15±0.8	35±1.2	1.3±0.5
F 40*6.5*18-35*1.3	40±1.5	6.5±0.5	18±0.8	35±1.2	1.3±0.5
F 45.6*8*18.4-37*1.4	45.6±1.5	8±0.5	18.4±0.8	37±1.2	1.4±0.5
F 57.6*6.5*15-52*1.3	57.6±1.5	6.5±0.5	15±0.8	52±1.5	1.3±0.5
F 60.6*6.5*15-55*1.3	60.6±1.5	6.5±0.5	15±0.8	55±1.5	1.3±0.5