

分割フェライトコア SR・SRM・SRSタイプ

Split Cores SR, SRM and SRS Types

概要と特長

Product Outline and Features

▶ 低周波から高周波帯域までのフルラインナップ。

リングタイプ、分割タイプ、フラットタイプなど、お客様のニーズに合わせて様々なタイプをご用意いたします。

低周波分割タイプは、リングタイプと同等の性能を実現いたします。

• The full lineup of high-frequency band from low-frequency band.

To suit your needs, we offer various types, such as ring-type, split type, flat type etc.

Low-frequency splitting type is equivalent to the characteristics of ring type.

E04SRMシリーズ



E04
フェライトコア
Ferrite Core

仕様

Specifications

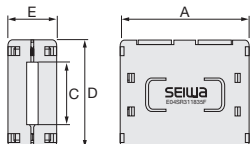
形番 Part No.	周波数帯域 Frequency band	外形寸法 (mm) Dimensions					適用ケーブル径 [最大] (mm) Max. Applicable Cable Size
		A	B	C	D	E	
E04SR311835F	高周波	35.0	—	17.5	30.8	12.2	17.5×2.6
E04SR150718		22.0	18.0	7.0	15.0	—	φ 7.0
E04SR200917		21.0	17.0	9.0	20.0	—	φ 9.0
E04SR200932		36.0	32.0	9.0	19.5	—	φ 9.0
E04SR211132		36.0	32.0	11.0	20.5	—	φ 11.0
E04SR301334		39.0	34.0	13.0	30.0	—	φ 13.0
E04SR401938		61.0	38.0	19.0	40.0	—	φ 19.0
E04SR130525A		25.0	20.0	5.0	12.8	11.2	φ 3.0~5.0
E04SR130525AB		25.0	20.0	5.0	12.8	11.2	φ 3.0~5.0
E04SR170730A		30.0	23.0	7.0	16.5	15.0	φ 4.0~7.0
E04SR170730AB		30.0	23.0	7.0	16.5	15.0	φ 4.0~7.0
E04SR200935A		35.0	28.0	9.0	19.5	17.4	φ 6.0~9.0
E04SR200935AB		35.0	28.0	9.0	19.5	17.4	φ 6.0~9.0
E04SR241336A		36.0	29.0	13.0	23.5	22.0	φ 10.0~13.0
E04SR241336AB		36.0	29.0	13.0	23.5	22.0	φ 10.0~13.0
NEW E04SR5200917S		24.6	20.8	8.4	24.5	24.2	φ 8.0
NEW E04SR5251512		19.0	15.0	14.0	31.0	29.5	φ 14.0
E04SRM281312		低周波	16.0	—	12.0	35.0	33.0
E04SRM381913	17.0		—	18.0	45.0	43.0	φ 18.0
E04SRM472715	20.0		—	27.0	54.0	52.0	φ 26.0
E04SRM563218	23.0		—	32.0	65.0	62.0	φ 31.0

SR タイプ：取付方法は結束バンド固定タイプで結束バンドが1本添付されています。
 SR-A, SR-Fタイプ：取付方法はケーブル固定タイプです。
 SR-ABタイプ：樹脂ケースは黒色です。
 E04SRB：筐体固定タイプ取付孔φ 4.8~φ 4.9、板厚0.5~2.0mm (E04SR200917用)
 E04SRMB：筐体固定タイプ取付孔φ 4.8~φ 4.9 (E04SRMシリーズ用)
 SR type: Intended to be fastened with a supplied binding band.
 SR-A, SR-F type: Intended to be fixed to a cable.
 SR-AB type: The plastic resin case is black.
 E04SRB: Intended to be fixed to an enclosure. Mounting hole diameter range 4.8-4.9 mm, Thickness range 0.5-2.0mm (for E04SR200917)
 E04SRMB: Intended to be fixed to an enclosure. Mounting hole diameter range 4.8-4.9

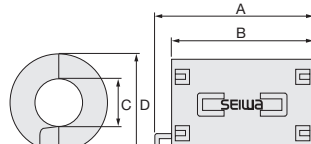
形状

Dimensions

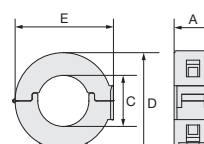
SR-Fタイプ SR-F type



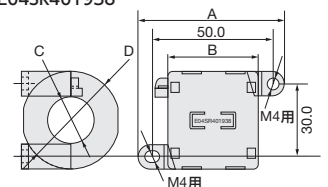
SRタイプ SR type



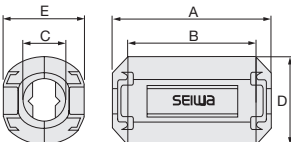
SRMタイプ SRM type



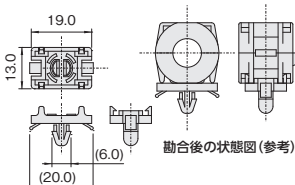
E04SR401938



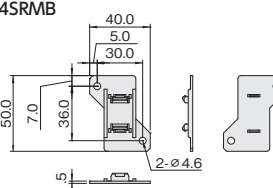
SR-Aタイプ SR-A type
SR-ABタイプ SR-AB type



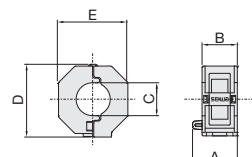
E04SRB



E04SRMB



SRSタイプ SRS type



単位: mm
in mm

分割フェライトコア SR・SRM・SRSタイプ

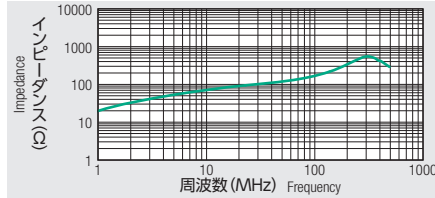
Split Cores SR, SRM and SRS Types

インピーダンス特性

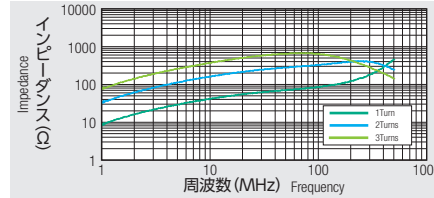
Impedance-frequency Curve

高周波

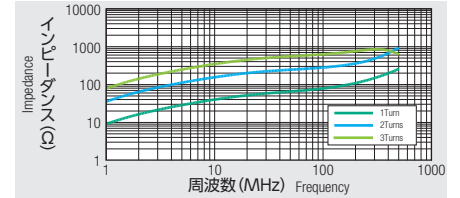
E04SR311835F



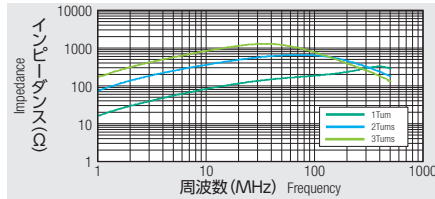
E04SR150718



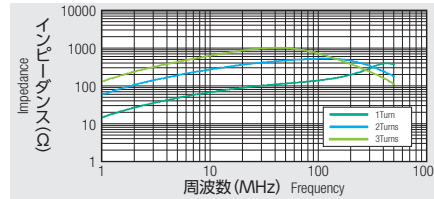
E04SR200917



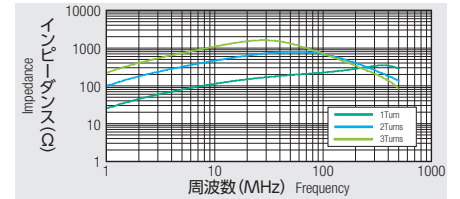
E04SR200932



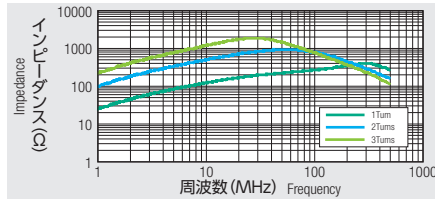
E04SR211132



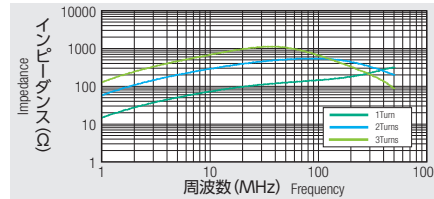
E04SR301334



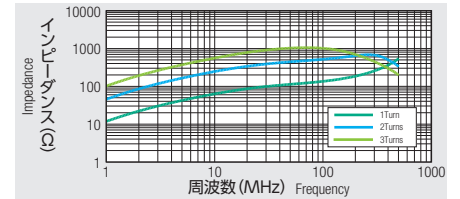
E04SR401938



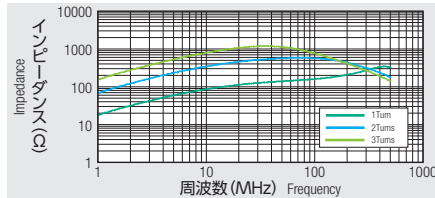
E04SR130525A E04SR130525AB



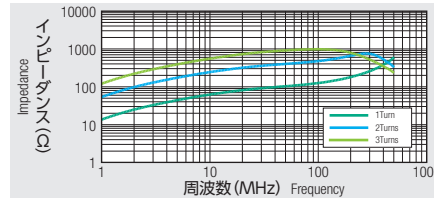
E04SR170730A E04SR170730AB



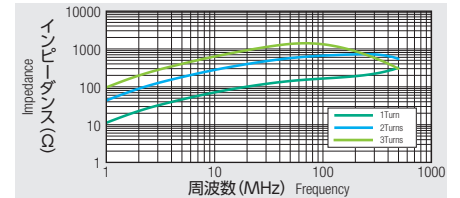
E04SR200935A E04SR200935AB



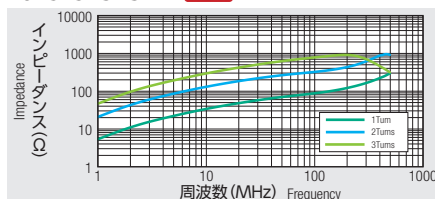
E04SR241336A E04SR241336AB



E04SRS200917S **NEW**

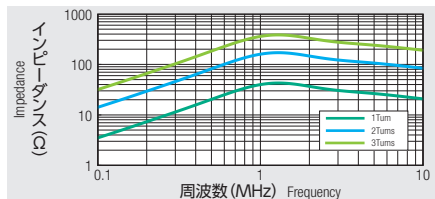


E04SRS251512 **NEW**

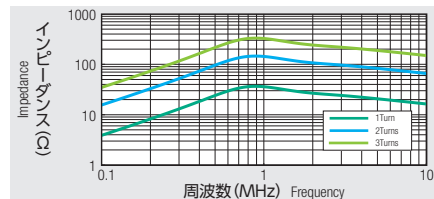


低周波

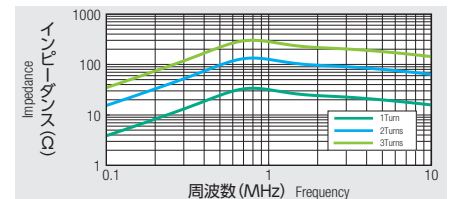
E04SRM281312



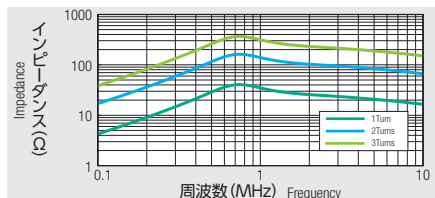
E04SRM381913



E04SRM472715



E04SRM563218



*特性図(インピーダンス特性)はWebで公開しています。(http://www.seiwa.co.jp/)
* You can see characteristic graphs (Z-f curve) for EMC products at our website. (http://www.seiwa.co.jp/)

非分割フェライトコア RC・RM・RMXタイプ

Non-split Ring Cores RC and RM and RMX Types

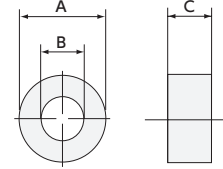
概要と特長

Product Outline and Features

- ▶ 低周波から高周波帯域までのフルラインナップを取り揃えております。
- ▶ 外径φ 10.0～φ 61.0まで取り揃えています。
- ▶ E04RMの表面には、絶縁性の高い塗装を施しています。
 - The full lineup of high-frequency band from low-frequency band.
 - Non-split ring cores are available in a wide diameter range from 8.0 to 61.0.
 - The surface is coated with insulating paint. (E04RM type)

形状

Dimensions



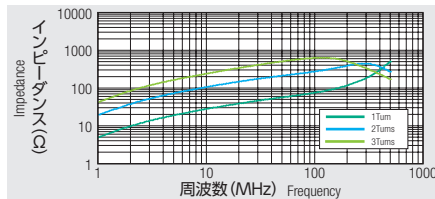
形番 Part No.	周波数帯域 Frequency band	外形寸法 (mm) Dimensions		
		A	B	C
E04RC100505	高周波	10.0	5.0	5.0
E04RC110519		11.0	5.0	18.5
E04RC120715		11.8	7.3	15.0
E04RC120916		12.0	8.5	16.0
E04RC151008		14.5	10.2	8.0
E04RC150719		15.0	7.0	19.0
E04RC160928		16.0	9.0	28.0
E04RC161010		16.0	10.0	10.0
E04RC170813		16.5	8.2	13.0
E04RC170816		16.5	8.2	16.0
E04RC181006		17.5	9.5	6.4
E04RC181029		17.5	9.5	28.5
E04RC211010		20.5	10.2	10.0
E04RC241114		23.6	11.4	14.0
E04RC251512		25.0	15.0	12.0
E04RC281613		28.0	16.0	13.0
E04RC281620		28.0	16.0	20.0
E04RC311908		31.0	19.0	8.0
E04RC613620		61.0	35.5	20.0

形番 Part No.	周波数帯域 Frequency band	外形寸法 (mm) Dimensions		
		A	B	C
E04RM201010	低周波	20.0	10.0	10.0
E04RM251512		25.0	15.0	12.0
E04RM381913		38.0	19.0	12.7
E04RM472715		47.0	27.0	15.0
NEW E04RMX201010		20.0	10.0	10.0
NEW E04RMX251512		25.0	15.0	12.0
NEW E04RMX381913		38.0	19.0	12.7
NEW E04RMX472715		47.0	27.0	15.0

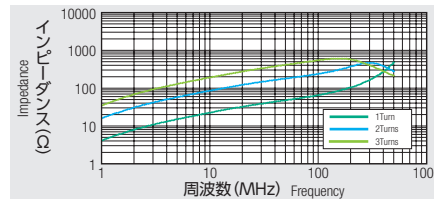
インピーダンス特性

Impedance-frequency Curve

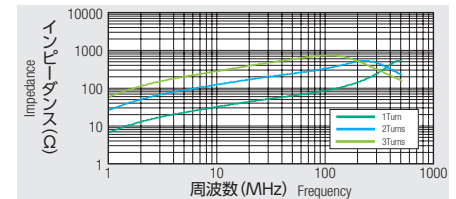
E04RC120916



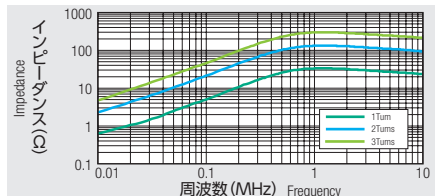
E04RC161010



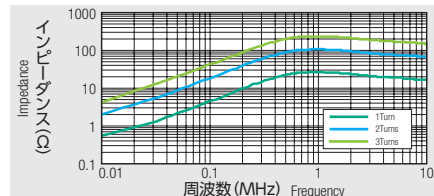
E04RC251512



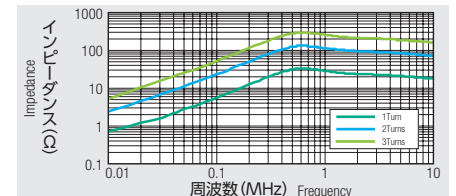
E04RM201010



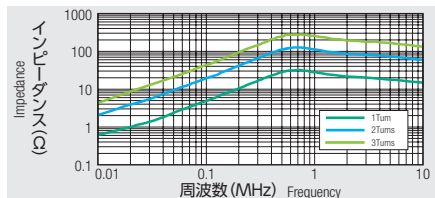
E04RM251512



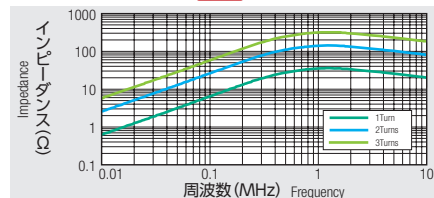
E04RM381913



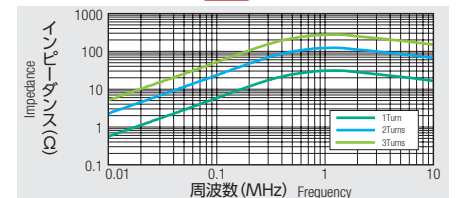
E04RM472715



E04RMX201010 **NEW**



E04RMX251512 **NEW**



※特性図(インピーダンス特性)はWebで公開しています。(http://www.seiwa.co.jp/)

* You can see characteristic graphs (Z-f curve) for EMC products at our website. (http://www.seiwa.co.jp/)

FPC用フェライトコア FDタイプ

Ferrite Cores for FPC FD Type

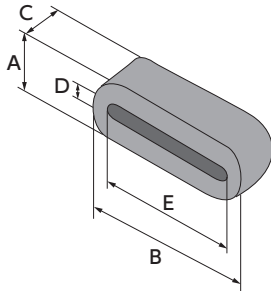
概要と特長

Product Outline and Features

- ▶豊富なサイズバリエーションによりお望みのサイズが選べます。
- You can choose the size of the wide variations depending on the size you wish.

形状

Dimensions



形番 Part No.	外形寸法 (mm) Dimensions				
	A	B	C	D	E
E04FD070503	2.0	9.5	3.0	0.5	7.0
E04FD070504	2.0	9.5	4.0	0.5	7.0
E04FD070505	2.0	9.5	5.0	0.5	7.0
E04FD110503	2.0	13.5	3.0	0.5	11.0
E04FD110504	2.0	13.5	4.0	0.5	11.0
E04FD110505	2.0	13.5	5.0	0.5	11.0
E04FD110506	2.0	13.5	6.0	0.5	11.0
E04FD110508	2.0	13.5	8.0	0.5	11.0
E04FD110510	2.0	13.5	10.0	0.5	11.0
E04FD130503	2.0	15.5	3.0	0.5	13.0
E04FD130504	2.0	15.5	4.0	0.5	13.0
E04FD130505	2.0	15.5	5.0	0.5	13.0
E04FD130506	2.0	15.5	6.0	0.5	13.0
E04FD130508	2.0	15.5	8.0	0.5	13.0
E04FD130510	2.0	15.5	10.0	0.5	13.0

E04
フェライトコア
Ferrite Core

FPC、FFC用フェライトコア FGタイプ

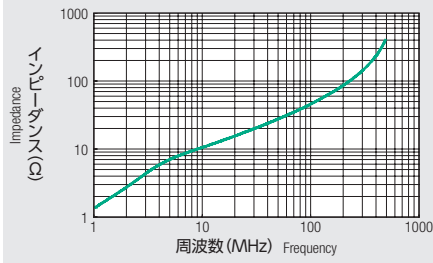
Ferrite Cores for FPC and FFC FG Types

形番 Part No.	外形寸法 (mm) Dimensions					適用ケーブル Applicable Cable	
	A	B	C	D	E		
E04FG170808	5.0	21.0	8.0	0.8	17.0	FPC用 for FPC	
E04FG200712	3.0	23.0	12.0	0.7	20.0		
E04FG210810	3.0	25.0	10.0	0.8	21.0		
E04FG270712	3.0	31.0	12.0	0.7	27.0		
E04FG280808	5.0	32.0	8.0	0.8	28.0		
E04FG280812	5.0	32.0	12.0	0.8	28.0		
E04FG280820	5.0	32.0	20.0	0.8	28.0		
E04FG340812	5.0	38.0	12.0	0.8	34.0		
E04FG460808	5.0	50.0	8.0	0.8	46.0		
E04FG460812	5.0	50.0	12.0	0.8	46.0		
E04FG530812	5.0	57.0	12.0	0.8	53.0		
E04FG171308	6.5	21.5	8.0	1.3	16.5		FFC用 for FFC
E04FG191308	6.5	24.0	8.0	1.3	19.0		
E04FG221308	6.5	27.0	8.0	1.3	22.0		
E04FG221312	6.5	27.0	12.0	1.3	22.0		
E04FG281308	6.5	33.5	8.0	1.3	28.0		
E04FG281310	6.5	33.5	10.0	1.3	28.0		
E04FG281312	6.5	33.5	12.0	1.3	28.0		
E04FG351312	6.5	40.0	12.0	1.3	34.8		
E04FG401308	6.5	45.2	8.0	1.3	40.0		
E04FG401312	6.5	45.2	12.0	1.3	40.0		
E04FG441308	6.5	49.8	8.0	1.3	44.0		
E04FG441312	6.5	49.6	12.0	1.3	44.0		
E04FG521312	7.0	57.9	12.0	1.3	52.0		

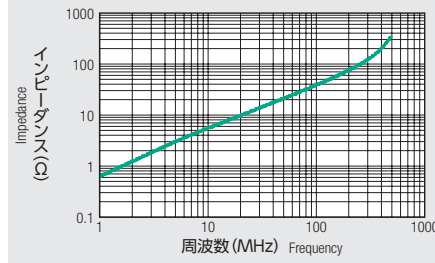
インピーダンス特性

Impedance-frequency Curve

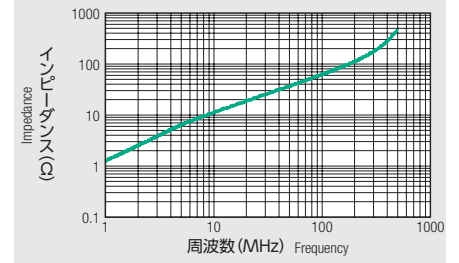
E04FD070505



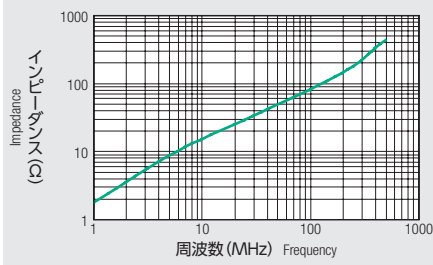
E04FD130503



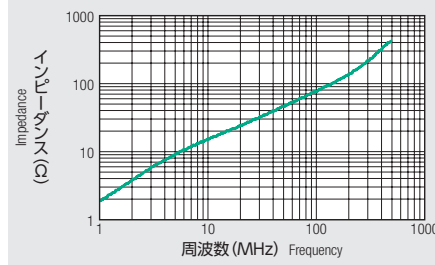
E04FD130510



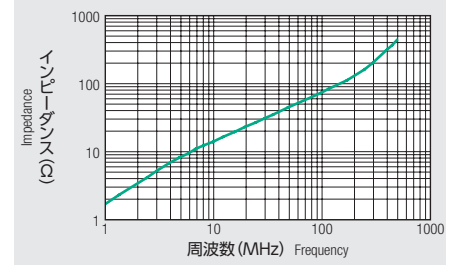
E04FG200712



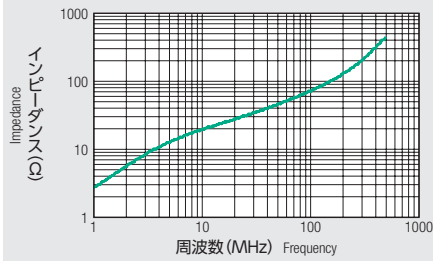
E04FG280808



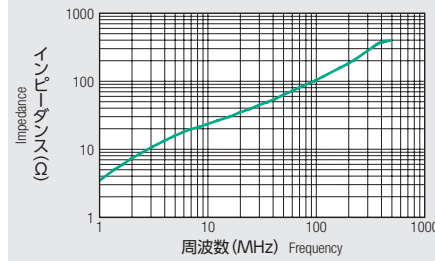
E04FG460808



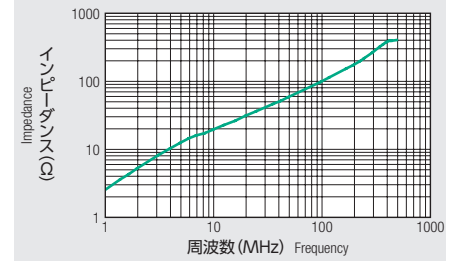
E04FG171308



E04FG281312



E04FG441312



※特性図(インピーダンス特性)はWebで公開しています。(http://www.seiwa.co.jp/)

* You can see characteristic graphs (Z-f curve) for EMC products at our website. (http://www.seiwa.co.jp/)

取り付け方法

Method of mounting

E04SR-A/E04SR-AB タイプ

樹脂ケースの爪で簡単に固定が可能です。
It can be fixed easily with the nail of a resin case.



E04SR/E04SRS タイプ

結束バンドで固定可能です。
It can be fixed with binding band.



E04SR401938

M4サイズのビスで固定可能です。
It can be fixed with M4 size screws.



E04SRM シリーズ

オプションの台座(E04SRMB)で固定可能です。
It is fixable by the pedestal (E04SRMB) of an option.



E04SR200917

オプションの台座(E04SRB)で固定可能です。
It is fixable by the pedestal (E04SRB) of an option.



技術資料

Technical Information

ケーブルの巻数とフェライトコア数によるインピーダンス Relation between No. of Turns/Cores and Impedance

1ターンでインピーダンスが足りない場合、2ターン、3ターンと巻数を増やすことでインピーダンスを大きくすることが出来ます。インピーダンスはターン数の2乗倍で大きくなります。ただし、図1に示す通り高周波では線間容量の影響である周波数を越えるとインピーダンスが減少するため、適応周波数を考慮する必要があります。フェライトコアの使用数を増やすと図2に示す通り、使用数に比例してインピーダンスは増加します。

If impedance is insufficient as a result of the cable passing through the ferrite core once (1 turn), impedance can be increased by passing the cable through it twice or three times. Impedance increases with the square of the number of turns. However, as shown in Fig. 1, because of line capacity, impedance begins to go down when the frequency exceeds a certain level, so the frequency employed should be determined carefully.

When the number of cores in use is increased, impedance goes up in proportion to the number of cores, as shown in Fig. 2.

1ターン 1 turn



2ターン 2 turns



3ターン 3 turns



図1 インピーダンスと巻数の関係

Fig. 1 Relation between Impedance and No. of Turns

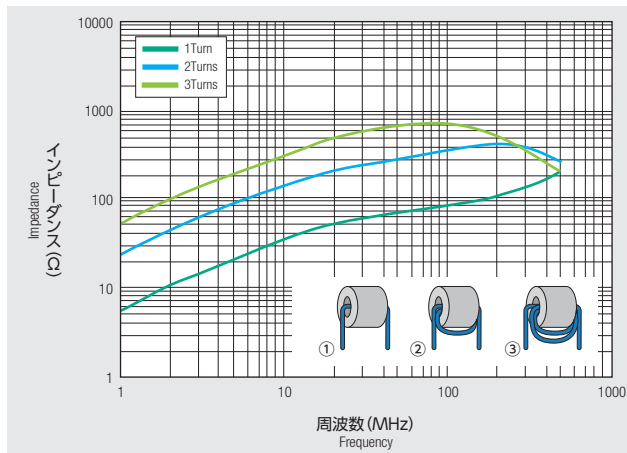
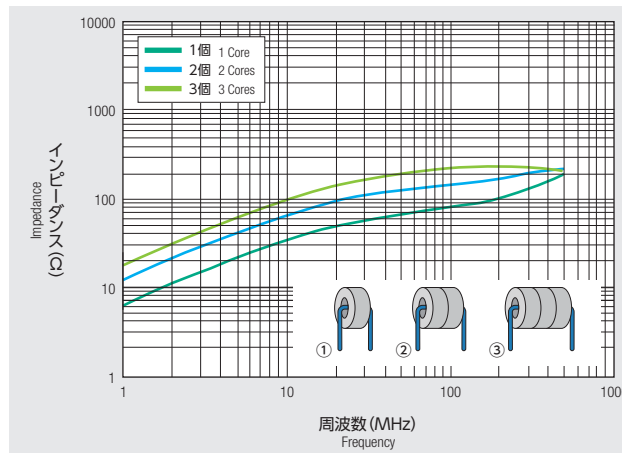


図2 インピーダンスとフェライトコア数の関係

Fig. 2 Relation between Impedance and No. of Cores



ギャップ Gaps

フェライトコアを後付けする場合、分割型を使用すれば簡単に取り付けられる事が出来ます。分割型の切断面はギャップが生じない様に加工されているため、図3の分割型と非分割型を比較しても特性は殆ど変わりません。但し、塵などが切断面に入りギャップが生じると図3のギャップに示す通り低い周波数でインピーダンスが大幅に低下しますので、切断面に塵などが入りギャップが生じない様に取り付けて下さい。

A split ferrite core is easily fitted to a cable fixed in place. The split core is designed to eliminate the joint gap. As shown in Fig. 3, the characteristics of the split ferrite core are almost the same as those of the non-split (standard) ferrite core. However, if dust or foreign matter should get into the joint and produce a gap, the impedance would considerably decline at low frequencies as indicated by the curve representing the gapped ferrite core. Therefore, when fitting the split core, care should be taken not to allow dust to get into the joint.

図3 インピーダンスとギャップの関係

Fig. 3 Relation between Impedance and Gaps

