

# Ferrite Cores for EMI Suppression For Round Cable

## T Series(Toroidal)

### FEATURES

- Various shapes and materials are available for the round type cable. Moreover, winding the number of turns can easily do the noise suppression effects.

### APPLICATIONS

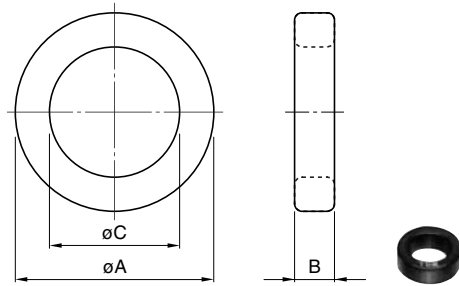
Imaging devices, audio equipment, automotive electronics, telecommunication devices, office automation equipment, and digital interface various other cables.

- Absorption EMI and penetrating noise
- Prevent parasitic oscillation

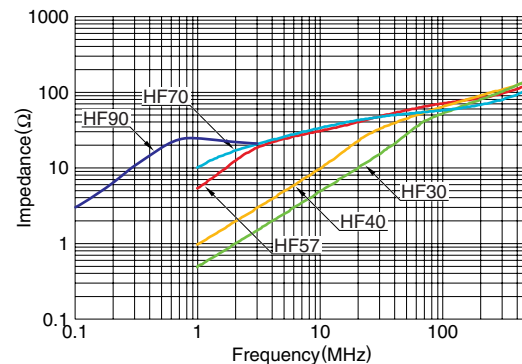
### MATERIAL CHARACTERISTICS

Material	Initial permeability $\mu_i$	Temperature factor of initial permeability $\alpha_{\mu ir} \times 10^{-6}/^{\circ}\text{C}$	Curie temperature $T_c(^{\circ}\text{C})$	Saturation magnetic flux density $B_s$ (mT)	Electrical resistivity $\rho$ ( $\Omega \cdot \text{m}$ )
HF90	5000	0 to 9	>165	485[H=1194A/m]	0.3
HF70	1500	1 to 6	>100	280[H=1600A/m]	$10^5$
HF57	600	3 to 15	>150	370[H=4000A/m]	$10^5$
HF40	120	8 to 18	>250	410[H=4000A/m]	$10^5$
HF30	45	5 to 15	>300	320[H=4000A/m]	$10^5$

### SHAPES AND DIMENSIONS/CHARACTERISTICS MATERIAL CHARACTERISTICS



### TYPICAL MATERIAL CHARACTERISTICS SHAPE: T20X10X12



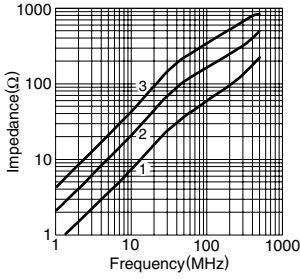
Part No.	Dimensions(mm)			Impedance Z ( $\Omega$ )[at 23°C]					
	$\phi A$	B	$\phi C$	HF40		HF70		HF90	
				10MHz	100MHz	10MHz	100MHz	0.1MHz	1MHz
T8X4X4	8.0±0.2	4.0±0.2	4.0±0.2	7	60	21	36	—	—
T10X3X6	10.0±0.3	3.0±0.2	6.0±0.2	5	38	10	20	—	—
T10X5X5	10.0±0.3	5.0±0.3	5.0±0.25	—	—	23	39	—	—
T12X8X7.3	12.0±0.3	8.0±0.3	7.3±0.2	—	—	28	47	—	—
T14X5X8	14.0±0.3	5.0±0.2	8.0±0.3	—	—	—	—	1	12
T14X7X8	14.0±0.3	7.0±0.2	8.0±0.3	8	65	29	48	2	18
T16X8X12	16.0±0.4	8.0±0.3	12.0±0.3	6	48	18	31	—	—
T18X6X10	18.0±0.4	6.0±0.2	10.0±0.3	7	61	24	51	2	16
T18X10X10	18.0±0.4	10.0±0.3	10.0±0.3	14	90	36	69	3	29
T20X10X12	20.0±0.4	10.0±0.3	12.0±0.3	10	65	34	58	—	—
T22X6.5X14	22.0±0.4	6.5±0.3	14.0±0.3	7	53	20	39	2	13
T22X10X14	22.0±0.4	10.0±0.3	14.0±0.3	9	62	30	60	3	22
T25X8X15	25.0±0.4	8.0±0.3	15.0±0.3	—	—	—	—	3	19
T25X13X15	25.0±0.4	13.0±0.3	15.0±0.3	11	93	45	80	4	32
T28X8X16	28.0±0.4	8.0±0.3	16.0±0.4	—	—	—	—	3	20
T28X13X16	28.0±0.4	13.0±0.3	16.0±0.4	13	90	51	90	4	29
T29X7.5X19	29.0±0.4	7.5±0.3	19.0±0.5	—	—	23	47	—	—
T31X8X19	31.0±0.5	8.0±0.4	19.0±0.5	8	61	28	52	—	—
T31X13X19	31.0±0.5	13.0±0.3	19.0±0.5	14	90	45	80	—	—
T38X14X22	38.0±0.8	14.0±0.3	22.0±0.5	—	—	—	—	6	23
T44.5X13X30	44.5±1.1	13.0±0.3	30.0±0.8	—	—	—	—	4	18
T62X13X39	62.5±1.3	13.5±0.3	39.0±0.8	—	—	—	—	5	13
T80X20X50	80.0±1.6	20.0±0.5	50.0±1.0	—	—	—	—	8	15
T104X20X80	104.0±2.1	20.0±0.5	80.0±1.6	—	—	—	—	4	10

- Impedance values are reference values.
- — means that there is no item which corresponds to each Material.
- Other materials and shapes are also available in addition to standard products. Please contact us for more information.
- Sample kits with cores for evaluation are also available (EMC-A201/EMC-A202/EMC-A203/EMC-A204).

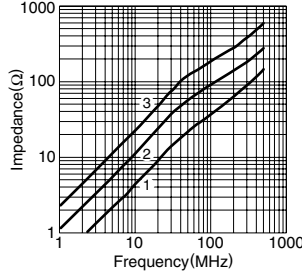
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**TYPICAL ELECTRICAL CHARACTERISTICS**  
**Z, R, X vs. FREQUENCY CHARACTERISTICS**

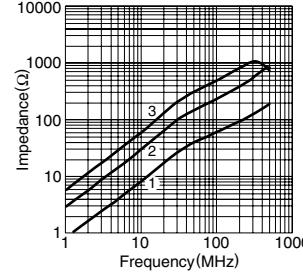
**HF40T8X4X4**



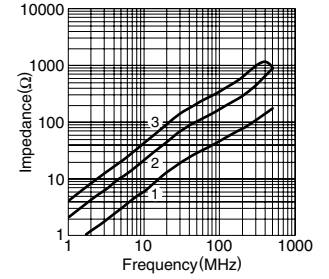
**HF40T10X3X6**



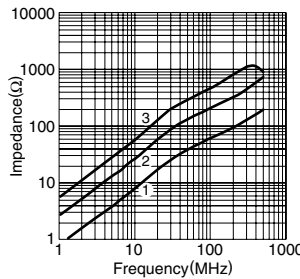
**HF40T14X7X8**



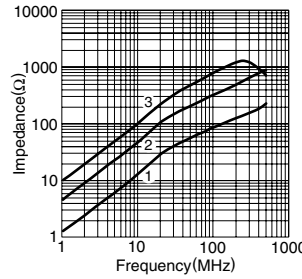
**HF40T16X8X12**



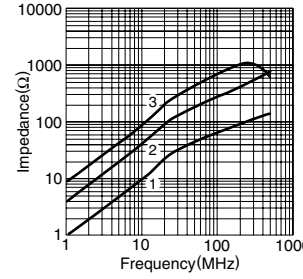
**HF40T18X6X10**



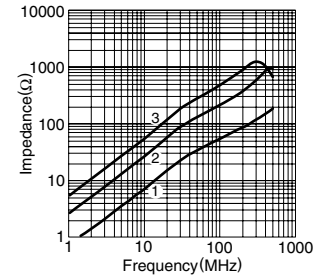
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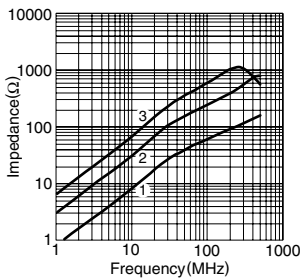
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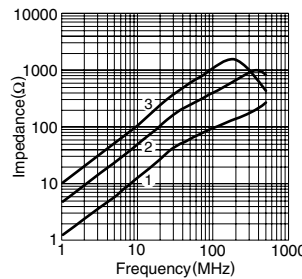
**HF40T22X6.5X14**



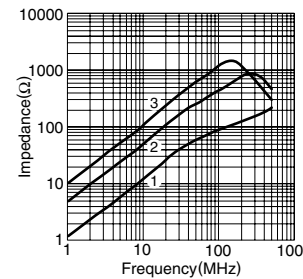
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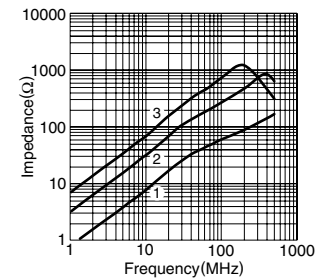
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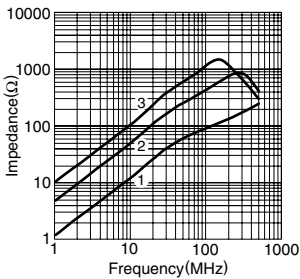
**HF40T28X13X16**



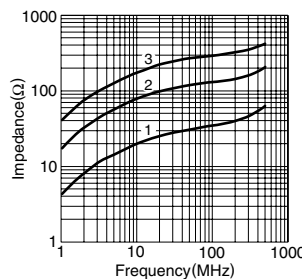
**HF40T31X8X19**



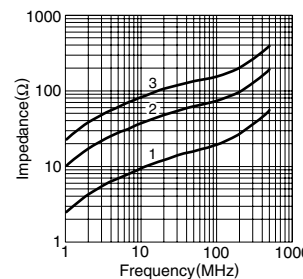
**HF40T31X13X19**



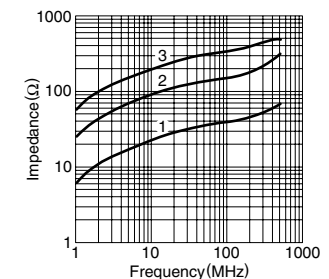
**HF70T8X4X4**



**HF70T10X3X6**



**HF70T10X5X5**

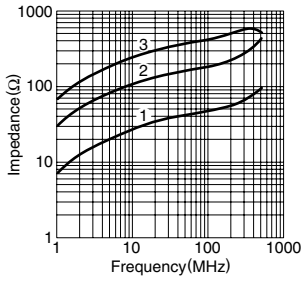


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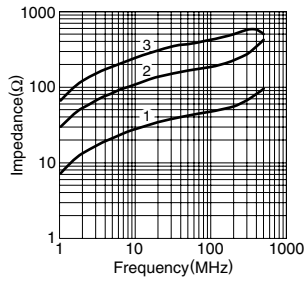
**TYPICAL ELECTRICAL CHARACTERISTICS**

**Z, R, X vs. FREQUENCY CHARACTERISTICS**

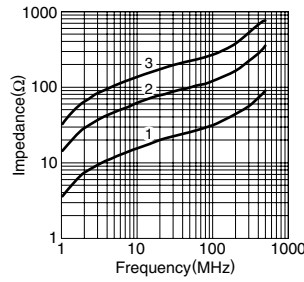
**HF70T12X8X7.3**



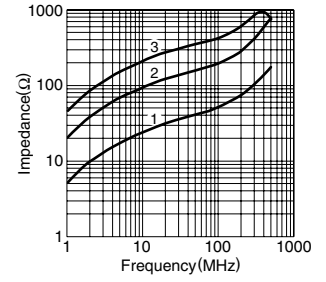
**HF70T14X7X8**



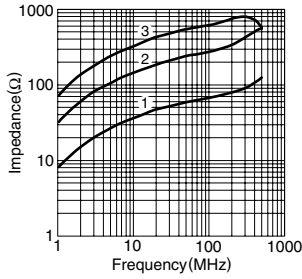
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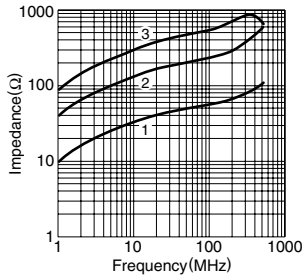
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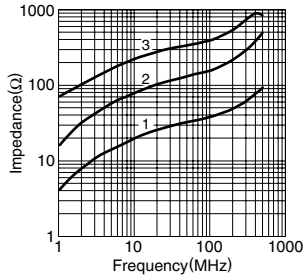
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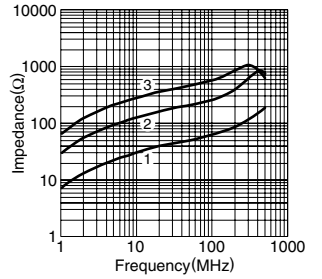
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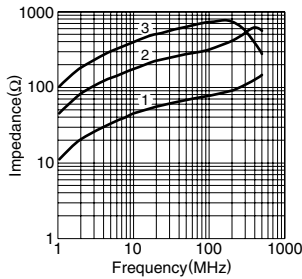
**HF70T22X6.5X14**



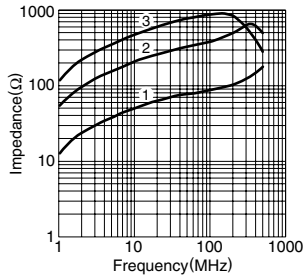
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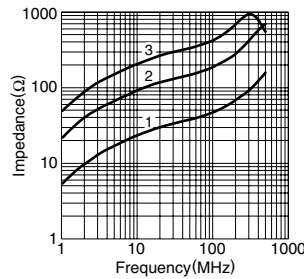
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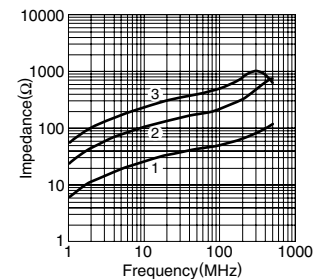
**HF70T28X13X16**



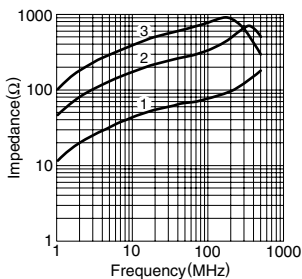
**HF70T29X7.5X19**



**HF70T31X8X19**



**HF70T31X13X19**



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