

Ferrites for EMI Suppression

For Round Cable

T Series(Toroidal)

Issue date: May 2011

- All specifications are subject to change without notice.
 - Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.
-

Ferrite Cores for EMI Suppression For Round Cable

T Series(Toroidal)

FEATURES

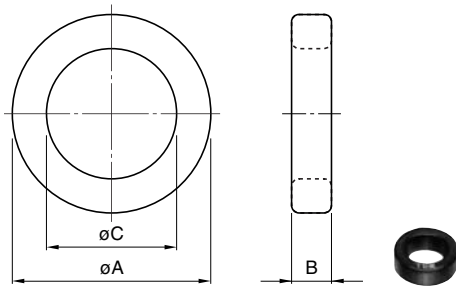
- Various shapes and materials are available for the round type cable. Moreover, winding the number of turns can easily do the noise suppression effects.

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

SHAPES AND DIMENSIONS/CHARACTERISTICS

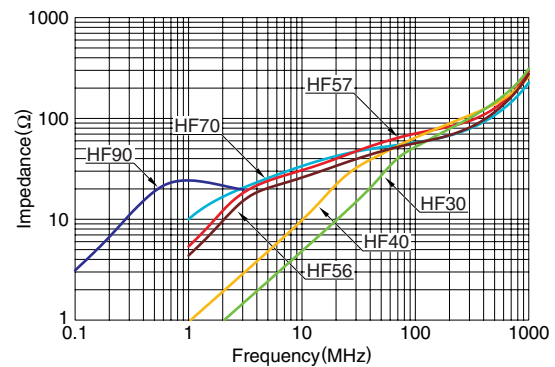


MATERIAL CHARACTERISTICS

Material	Initial permeability μ_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 ρ ($\Omega \cdot \text{m}$)
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
HF56	600	18 to 28	>130	290[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

TYPICAL MATERIAL CHARACTERISTICS

SHAPE: T20X10X12



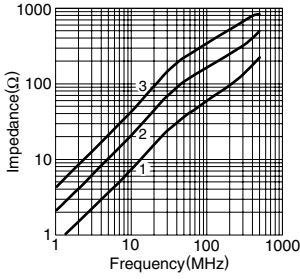
Part No.	Dimensions(mm)			Impedance Z (Ω)[at 23°C]					
	ϕA	B	ϕC	HF40		HF70		HF90	
				10MHz	100MHz	10MHz	100MHz	0.1MHz	1MHz
T8X4X4	8.0±0.2	4.0±0.2	4.0±0.2	7	60	21	36	—	—
T10X3X6	10.0±0.3	3.0±0.2	6.0±0.2	5	38	10	20	—	—
T10X5X5	10.0±0.3	5.0±0.3	5.0±0.25	—	—	23	39	—	—
T12X8X7.3	12.0±0.3	8.0±0.3	7.3±0.2	—	—	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).

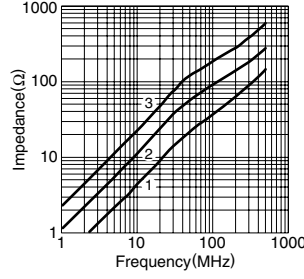
- All specifications are subject to change without notice.

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

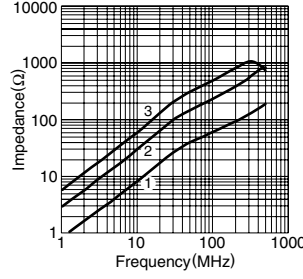
HF40T8X4X4



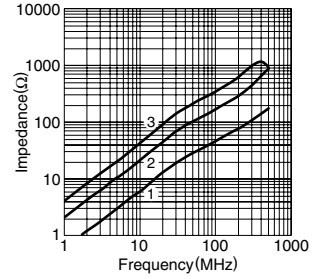
HF40T10X3X6



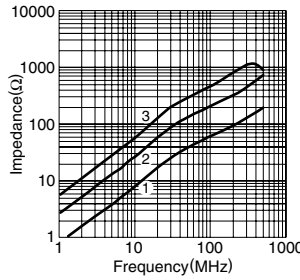
HF40T14X7X8



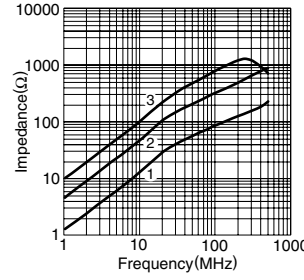
HF40T16X8X12



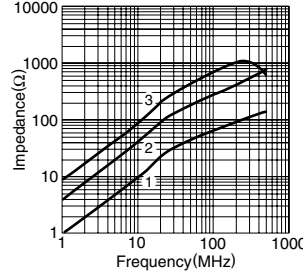
HF40T18X6X10



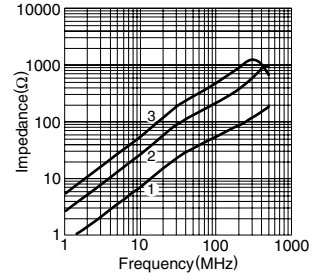
HF40T18X10X10



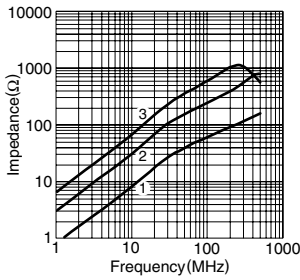
HF40T20X10X12-G



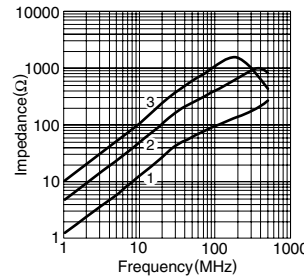
HF40T22X6.5X14



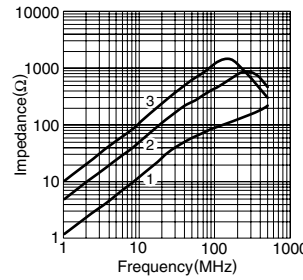
HF40T22X10X14



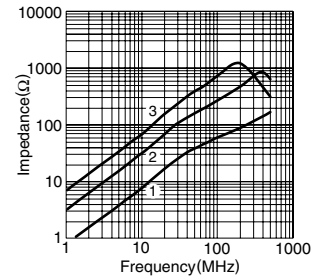
HF40T25X13X15



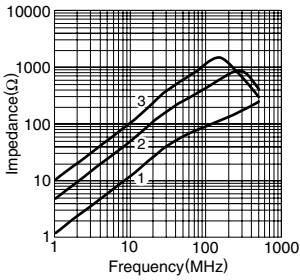
HF40T28X13X16



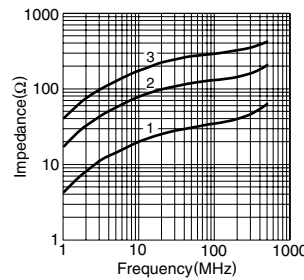
HF40T31X8X19



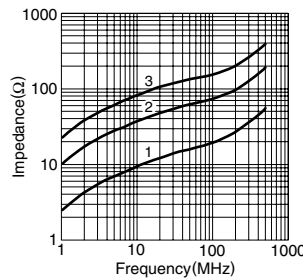
HF40T31X13X19



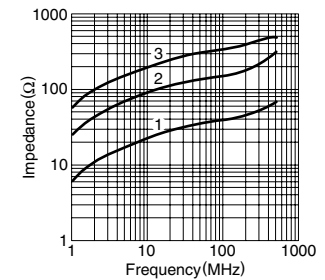
HF70T8X4X4



HF70T10X3X6

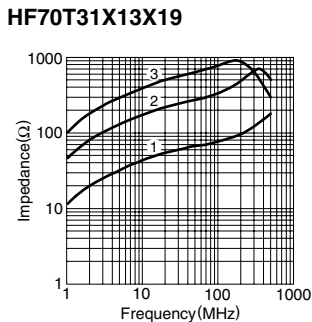
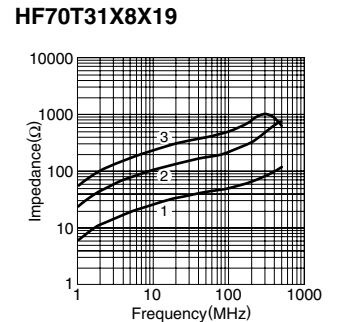
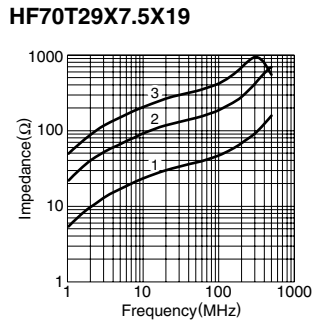
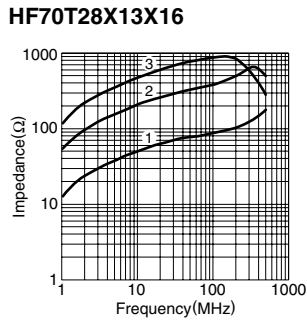
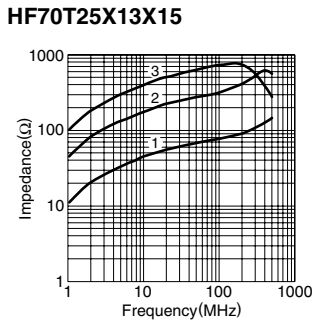
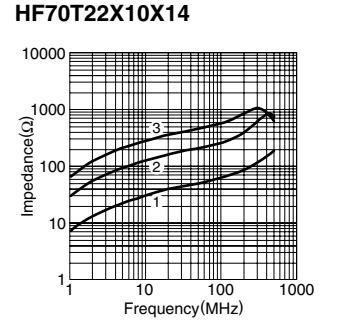
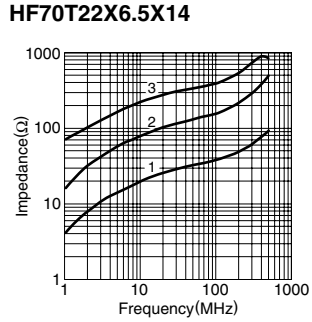
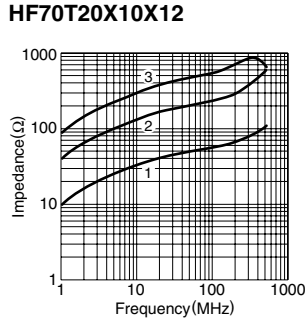
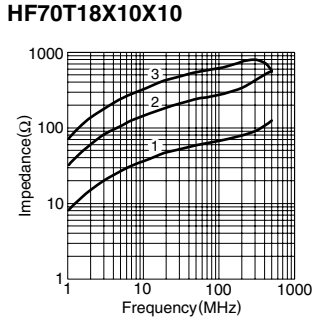
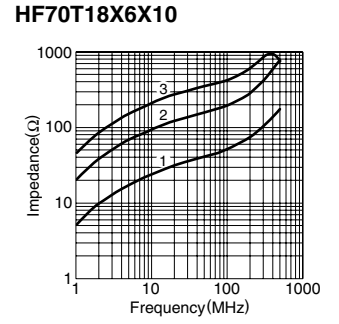
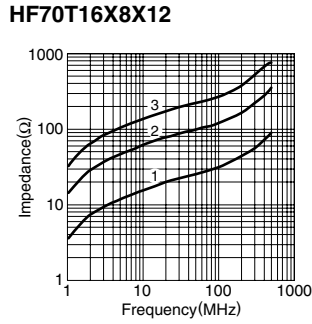
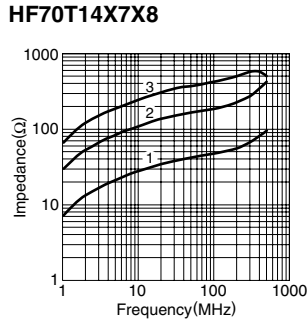
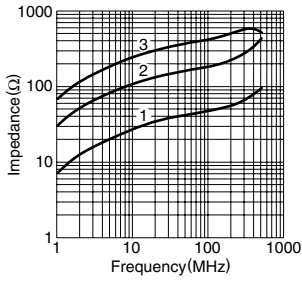


HF70T10X5X5



• All specifications are subject to change without notice.

TYPICAL ELECTRICAL CHARACTERISTICS
Z, R, X vs. FREQUENCY CHARACTERISTICS
HF70T12X8X7.3



• All specifications are subject to change without notice.