

# Ferrite for EMI Suppression

## High Permeability Material HF90

This ferrite material has high magnetic permeability and a peak impedance at a lower frequency band than conventional materials. It also has good noise absorption characteristics in the AM band (100kHz to 1.6MHz).

### FEATURES

- Good noise absorption characteristics in the frequency band from 100kHz to 1.6MHz.
- Replacing metal ferrite with this material can reduce cost.
- Effective noise suppression for devices with inverters.
- Compatible with various shapes and sizes for different use conditions.

### APPLICATIONS

- Air conditioners, microwave ovens, refrigerators, and other electrical home appliances.
- Industrial equipment with inverters.

### EXAMPLE SHAPES

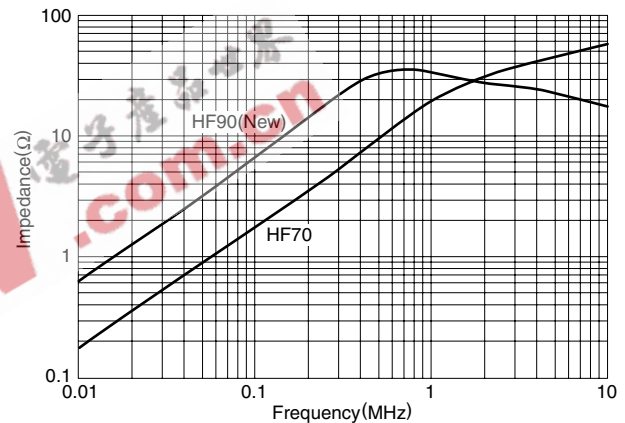
Shape	Dimensions in mm		
	Outer diameter	Height	Inner diameter
T14X7X8	14	7	8
T18X10X10	18	10	10
T22X10X14	22	10	14
T25X13X15	25	13	15
T28X13X16	28	13	16
T38X14X22	38	14	22
T80X20X50	80	20	50



### MATERIAL CHARACTERISTICS

Material	HF90		
Initial permeability[23°C]	$\mu$		5000
Coercive force	$T_c$	°C	>180
Saturation magnetic flux density [23°C, 1194A/m]	$B_s$	mT	460min.
Electrical resistivity	$\rho$	$\Omega \cdot m$	0.3
Resistivity	db	kg/m <sup>3</sup>	$4.8 \times 10^3$

### IMPEDANCE vs. FREQUENCY CHARACTERISTICS



Sample shapes: T28×14×15 Number of coils: 1T