

# **Ferrites for EMI Suppression**

High Permeability Material

HF90 Series

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<sup>•</sup> All specifications are subject to change without notice.

<sup>•</sup> 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 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	Dimensions in mm

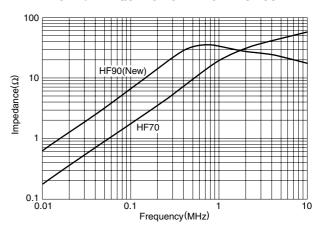
Shape	Outer diameter	Height	Inner diameter
T14X7X8	14	7	8
T18X10X10	18	10	10
T22X10X14	22	10	14
T25X13X15	25	13	15
T28X13X16	28	13	16
T38X14X22	38	14	22
T80X20X50	80	20	50



## **MATERIAL CHARACTERISTICS**

Material			HF90
Initial permeability[23°C]	μί		5000
Coercive force	Tc	°C	>165
Saturation magnetic flux density [23°C, 1194A/m]	Bs	mT	485
Electrical resistivity	ρ	Ω•m	0.3
Resistivity	db	kg/m <sup>3</sup>	4.8×10 <sup>3</sup>

#### **IMPEDANCE vs. FREQUENCY CHARACTERISTICS**



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