

Mector[®] HF Series系列

HF Series High Frequency Absorbent Powder

Mector™ HF High-Frequency Wave-Absorbing Powder is a small-particle-size flaky powder developed for lightweight applications of wave-absorbing materials in GHz and higher frequency bands. Due to its large specific surface area and high surface activity, the powder is prone to oxidation, which degrades magnetic performance. However, HF-series powder undergoes special modification treatment to greatly improve surface stability and resist oxidation and deterioration. In addition, the whole production process adopts vacuum protection to ensure stable powder transfer. Although the process flow is lengthy and process control requirements are strict, the stable magnetic properties of the powder can be effectively guaranteed.

Product Features & Advantages

- High reflection loss can be achieved at 1 GHz-6 GHz with low volume filling; applications at 6 GHz and higher frequencies are available by compounding with other wave-absorbing powders;
- Regular particle morphology, good dispersibility and broadband impedance matching;
- Halogen-free and eco-friendly, complying with EU RoHS Directive, REACH and other regulatory requirements.

Typical Applications

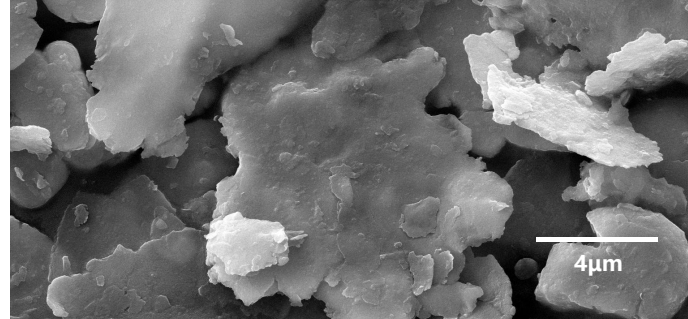
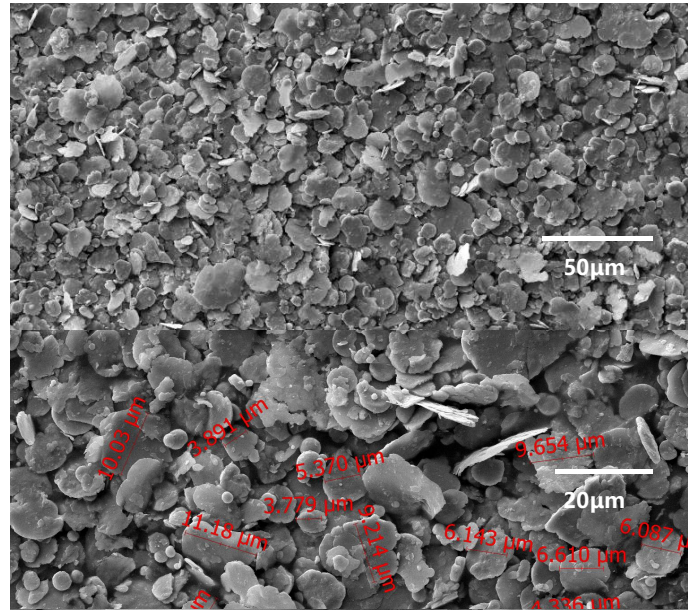
- Wave-absorbing materials and coatings;
- Anti-interference components for communication base stations, anechoic chambers, and equipment for L-band, S-band and C-band.

Supply Form

- 25 kg per drum;
- Please provide model and packaging requirements upon inquiry.

Usage Method

- Permeability of the composite material is measured using 2 mm-thick magnetic sheets containing 30-35 vol.% powder;
- Direct application is available based on customer-specific conditions.

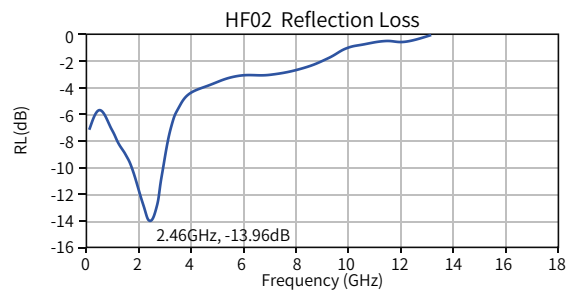
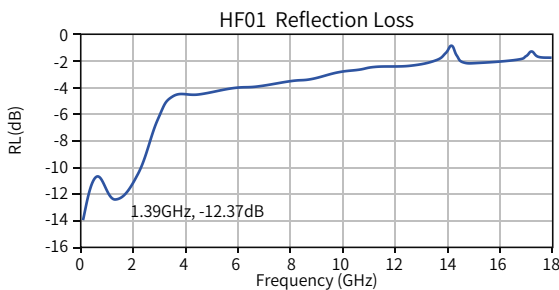


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Item	HF01	HF02	Test Standard
A.D (g/cm ³)	0.8 - 1.2	0.85 - 1.25	GB/T 1479.2-2011
T.D (g/cm ³)	1.0 - 1.3	1.1 - 1.35	GB/T 5162-2006
D10 (μm)	0.5 - 4	0.9 - 1.2	GB/T 19077.1-2008
D50 (μm)	3 - 9	2 - 8	GB/T 19077.1-2008
D90 (μm)	9 - 16	6 - 15	GB/T 19077.1-2008
Specific surface area (m ² /dm ³)	2300 - 2800	2500 - 3500	GB/T 19077.1-2008
Permeability μ' @3MHz	10 - 15	6 - 10	GB/T 32596-2016
Operating frequency (Hz)	1 - 18G	1 - 18G	GB/T 32596-2016
Shipping specifications (customizable)	25 kg/barrel		
Storage conditions	5 - 40°C/ (60±10) %RH		
shelf life	36 months		

Note: The data provided is solely for the reference of design engineers. The performance mentioned above represents the performance range of the series of products. Variations may occur in different models of products and in different application environments. Engineers should conduct tests based on the actual environment.



Coding Rules

HF 01 - X

① ② ③

- ① Product category: HE = economical
- ② Permeability: 08=80 permeability
- ③ Special code: such as different formula systems or special requirements

Statement:

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