

## **MF-401 Type S Powder**

### **Microwave Absorbing Powder**



MF-401 Type S powder is an Iron Silicide product providing low corrosion, high temperature and high magnetic saturation properties. It has enhanced electromagnetic properties in comparison with Iron aluminide, yet retains significant anti corrosion and elevated temperature properties. With a nominal Curie point above Carbonyl Iron Powder, this product will perform day in and day out in high heat flux and aggressive environmental conditions.

#### **Features:**

- Precision alloyed Iron Silicon powder with a proprietary coupling agent to provide enhanced bonding
- Broad Banded RF Absorption for Thin Coats
- Excellent electromagnetic absorption
- Oxidation Resistant
- Can be compounded or dispersed

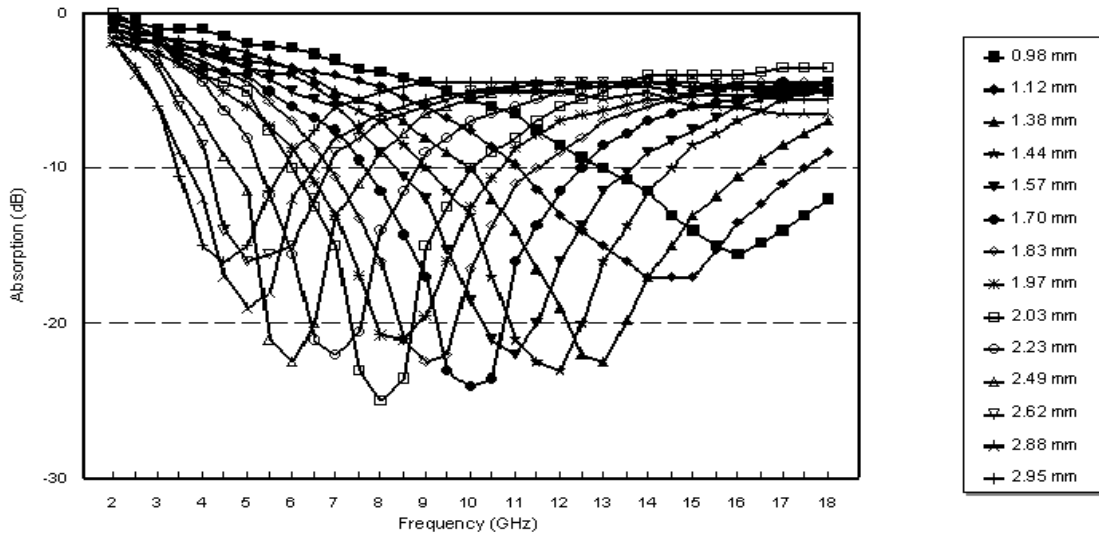
#### **Applications:**

- Extraneous Reflection Reduction of cavity enclosures
- Extraneous Reflection Reduction of active devices
- Excellent Near Field and Far Field Absorption
- Low Observable

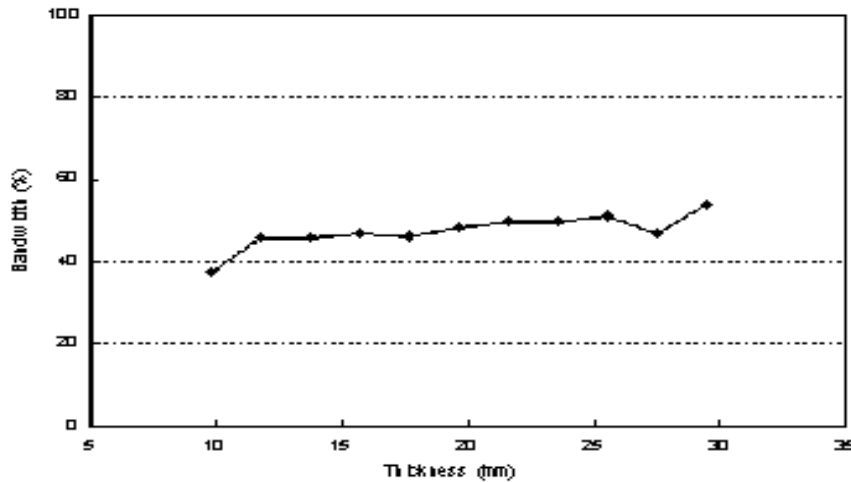
#### **Mechanical Data:**

- Particle Diameter: 5-25 microns
- Color: Charcoal Grey
- Density : 6.2 gm./mil
- Oxidation Resistance: > 900 °C
- Environmental Resistance: Salt , Solvent, and Corrosion

**Typical performance curves - Far Field**



MF-401 Type S powder is a resonant absorber. The center frequency in the far field is a function of thickness after cure. Typical data is shown above.



Typical performance yields a -10 dB bandwidth better than 40%