

# RF-Absorber

## MW1000

GBA

### Product Highlights

- Overall injection molding, high reliability
- High volume production, cost efficiency
- Customized shape and thickness
- PBT/PPS/PC as reliable base material
- RoHS and REACH compliance

### Product Application:

- Low density
- High loss
- Wide band working frequency range

The MW1000-series microwave absorbing materials are developed to meet the requirements of complex mechanical structures and high-volume production. The main working frequency is in the millimeter wave range.

The MW1000- series series uses various polymers as carriers, filled with specially formulated ferrite to form composite materials, which can effectively help improve antenna gain and reduce intracavity resonance.

The MW1000-series has excellent environmental adaptability to harsh environmental conditions: wide operating temperature range, oil resistance and UL-94 V0 flame rating. Material can be molded into complex shapes according to mechanical design. The magnetic filler makes the product have excellent wave absorbing performance even when the incident angle is greater than 65 degrees.

### SPECIFICATIONS TABLE

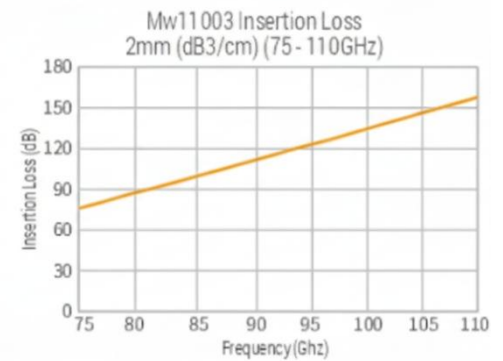
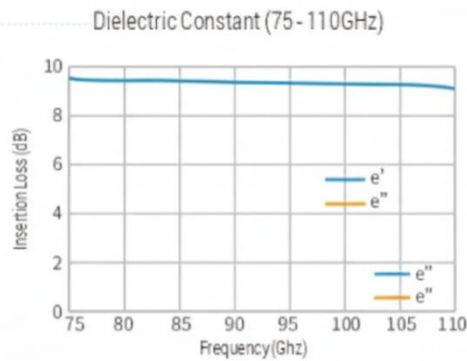
Parameters	Units of Measure	Test Method		
Color	–	Visual	Black	Black
Substrate	–	–	PBT	PBT
Dielectric Constant $\epsilon'$ (77GHz)	–	SJ20512-1995	9.5	7.9
Dielectric Constant $\epsilon''$ (77GHz)	–	SJ20512-1995	1.56	1.42
Free Space – S21-2mm (77 GHz)	dB	GBA – Free Space	-15.12	-7.58
Insertion Loss (77 GHz)	dB/cm	GBA – Free Space	95	77
Thermal Conductivity	W/m·K	SO22007-2	0.56	0.56
Volume Resistance	Ohm·cm	ASTM D257	$10^5$	$10^4$
Hardness	Shore D	ASTM D2240	75	75
Flammability Rating	–	UL-94	HB	HB
Melting Temperature	°C	–	210	210
Operating Temperature	°C	ASTM D1329	-50~+160	-50~+160

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## Performance curves

### MW1003 PERFORMANCE PARAMETERS



### MW1004 PERFORMANCE PARAMETERS

