

RF-Absorber

SW-6000

GBA

Product Highlights

- Low Density
- High Permeability
- Flexible
- Wide Frequency Range
- Optional PSA

Product application

- Padding around the antenna provides isolation or reduces side lobe interference;
- Die cutting parts to be applied to component(s) or unit(s) in microwave cavity to reduce electromagnetic interference;
- To make components for radomes and shielded test room.

Descriptions

The SW6000-series is a thin, flexible dielectric absorbing material. It has a wide RF frequency coverage and good insertion loss in the 50M-110GHz range. This material is specially designed for microwave applications, including high-speed optical transceivers, ADAS radar, 5G network equipment, etc.

The SW6090 materia has excellent environmental adaptability to harsh environmental conditions: wide operating temperature range, oil resistance and UL-94 V0 flame rating. The magnetic filler makes the product have excellent wave absorbing performance even when the incident angle is greater than 65 degrees.

SPECIFICATIONS TABLE

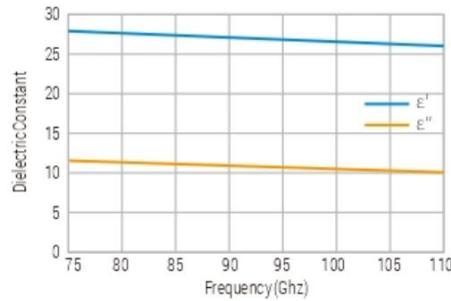
Parameters	Units of Measure	SW6090	SW6090K	Test Methods
Color	–	Black	Black	Visual
Substrate	–	Silica Gel	Silica Gel	–
Dielectric Constant E' (77GHz)	–	27.78	30	SJ20512-1995
Dielectric Constant E" (77GHz)	–	11.58	12.6	SJ20512-1995
Insertion Loss -S11 (77GHz)	dB	-3.08(0.38mm)	-8.2(1mm)	GBDG-70/90 (Free Space)
Insertion Loss -S21 (77GHz)	dB	- 13.88(0.38mm)	-22.5(1mm)	GBDG-70/90 (Free Space)
Hardness	Shore A	70	70	ASTMD2240
Flammability Rating	–	V-0	V-0	UL-94
Operating Temperature	°C	-70~+200	-70~+200	ASTMD1329
Thickness	mm	0.5~3.2	0.5~3.2	

RF-Absorber SW-6000

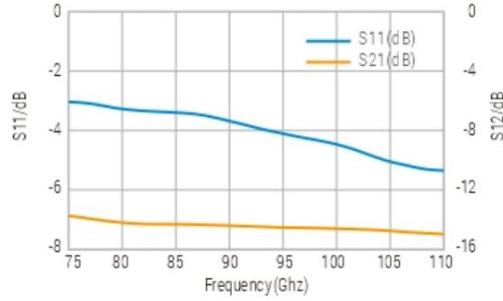
GBA

Performance curves

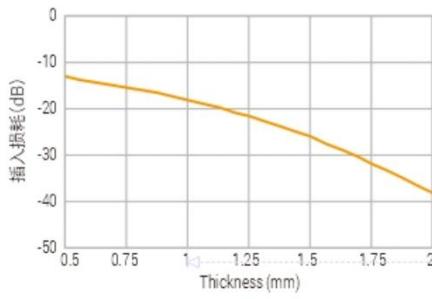
SW6090 Dielectric Constant (75~110GHz)



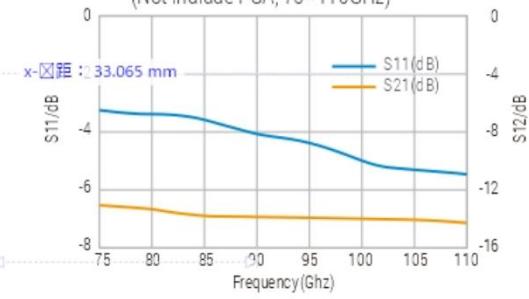
SW6090 Insertion Loss - 0.5mm (75~110GHz)



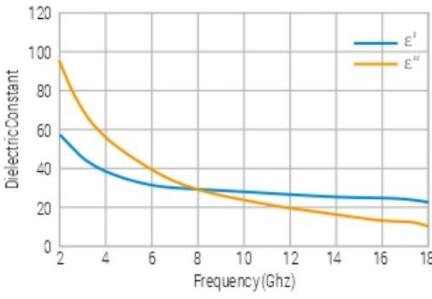
SW6090 Insertion Loss vs. Thickness (77GHz)



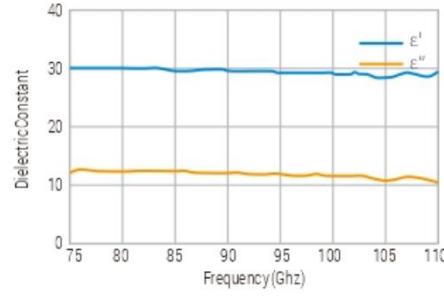
SW6090 Insertion Loss - 0.38mm (Not include PSA, 75~110GHz)



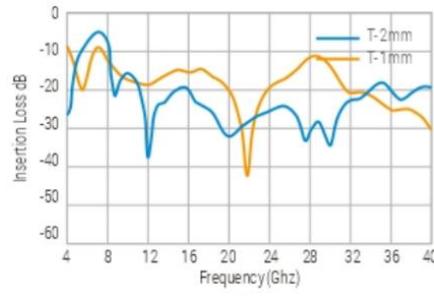
SW6090K Dielectric Constant (2~18GHz)



SW6090K Dielectric Constant (75~110GHz)



SW6090K Insertion Loss 1&2 mm (4~40GHz)



SW6090K Insertion Loss 1mm (75~110GHz)

