

# 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

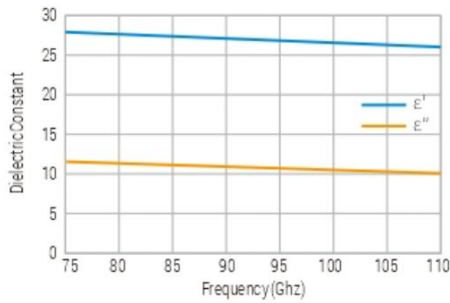
Parameters	Units of Measure	SW6090	SW6090K	Test Methods
Color	–	Black	Black	Visual
Substrate	–	Silica Gel	Silica Gel	–
Dielectric Constant E' (77GHz)	–	27.78	30	SJ20512-1995
Dielectric Constant E'' (77GHz)	–	11.58	12.6	SJ20512-1995
Insertion Loss -S11 (77GHz)	dB	-3.08(0.38mm)	-8.2(1mm)	GBDG-70/90 (Free 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

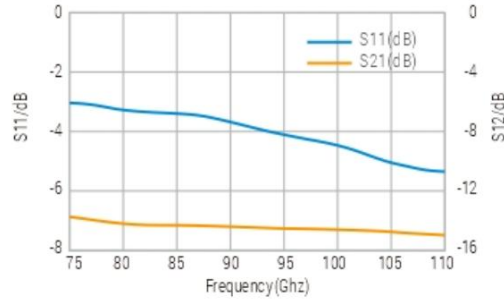
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## Performance curves

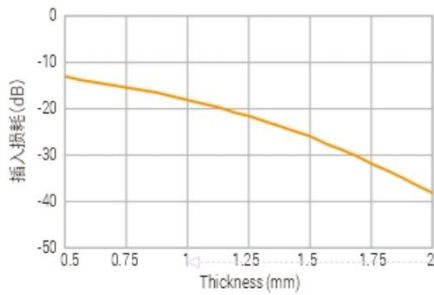
SW6090 Dielectric Constant (75~110GHz)



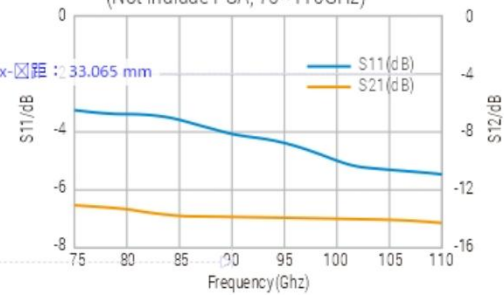
SW6090 Insertion Loss - 0.5mm (75~110GHz)



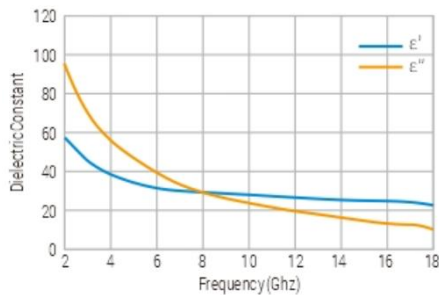
SW6090 Insertion Loss vs. Thickness (77GHz)



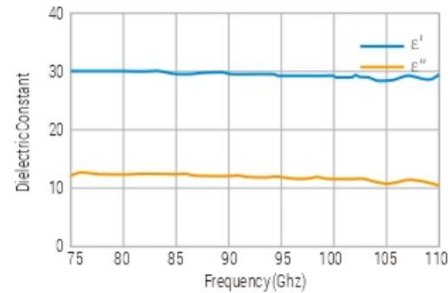
SW6090 Insertion Loss - 0.38mm (Not include PSA, 75~110GHz)



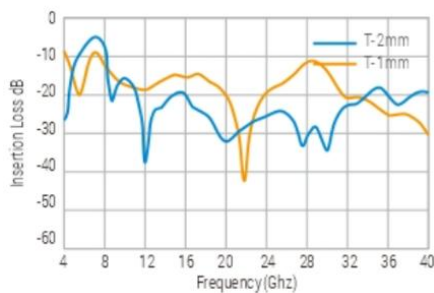
SW6090K Dielectric Constant (2~18GHz)



SW6090K Dielectric Constant (75~110GHz)



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



SW6090K Insertion Loss 1mm (75~110GHz)

