

# Wector® HAP Series

## High-frequency microwave absorbing materials

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Wector® HAP series microwave absorbing material is independently developed by Wave-Vector New Materials, composed of self-developed absorbers and silicone rubber. Its functional absorber is a thin and lightweight soft magnetic filler designed for reflection attenuation of high-incidence surface waves, applicable to the frequency range from 100 MHz to millimeter waves.

It adopts high-temperature-resistant silicone rubber elastomer as the bonding base material. Mixed with ceramic powder, soft magnetic particles, oil-resistant and flame-retardant additives, this flexible composite material provides both excellent microwave absorption and thermal conductivity performance.

### Product Features & Advantages

- Soft, shatter-resistant, thin and lightweight; easy to cut and process, suitable for installation in narrow spaces
- Insulating material; good microwave absorption performance is obtained when bonded or pressed onto metal substrates
- Customizable in various sizes and shapes
- Compliant with UL 94 V-0 flammability standard
- Halogen-free and eco-friendly, complying with EU RoHS, REACH and other regulatory requirements

### Typical Applications

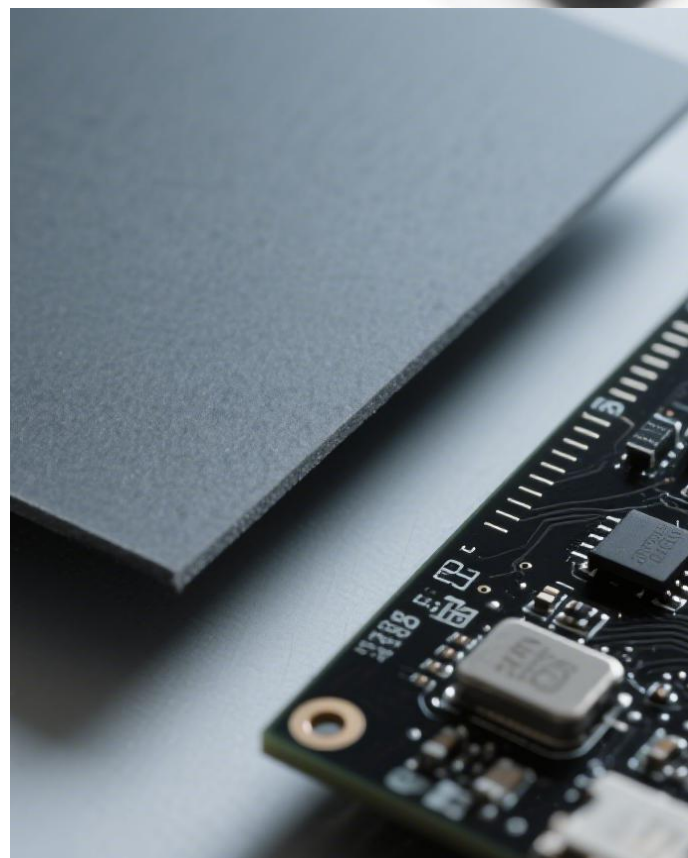
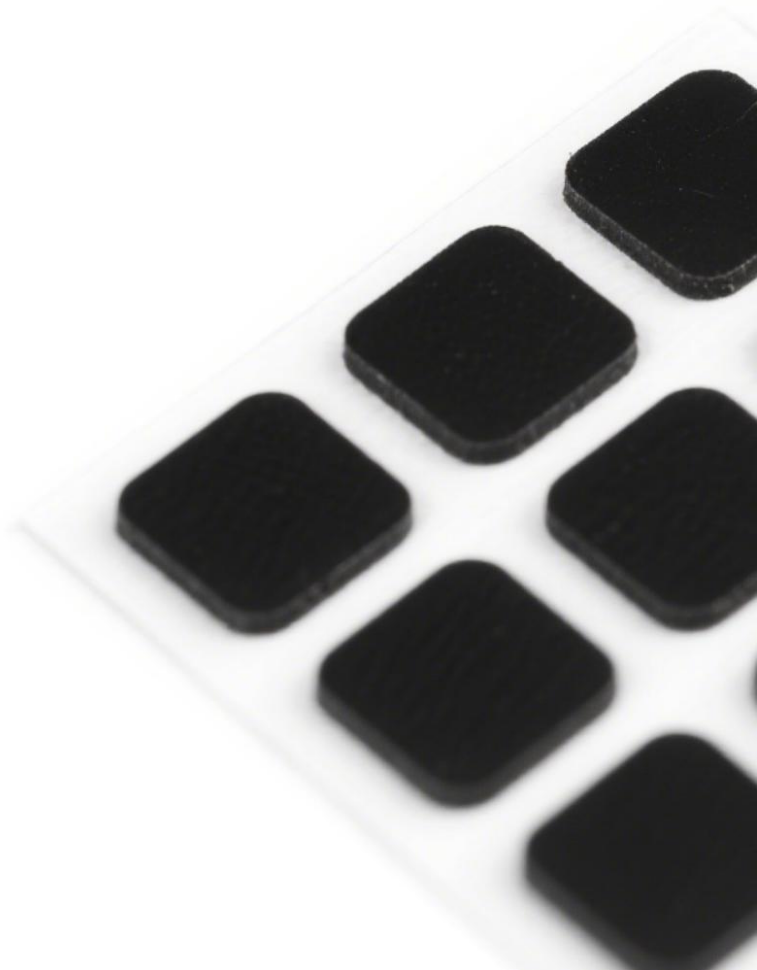
- Commercial Communications: Base stations, optical modules, routers, switches, etc.
- Industrial Electronics: Automotive electronics, UAVs, etc.
- Instrumentation & Measurement: Filters, test systems, etc.
- Security & National Defense: Radar systems, aerospace applications

### Transportation & Storage

- Store in a well-ventilated, cool and dry area away from open flames. Storage temperature: 24–27 °C, relative humidity: 40–60%.
- Non-toxic product, stored and transported as non-hazardous goods.

### Product Specifications

- Standard size: 300 mm × 300 mm
- Die-cut shapes can be customized according to customer requirements



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Item	Unit	Testing Standard	Indicator
Appearance	/	Visual	Grey
thickness range	mm	ASTM D374	0.5~3.0
hardness	Shore OO	ASTM D2240	60±5
density	g.cm <sup>-3</sup>	ASTM D792	3.35±0.2
thermal conductivity	W/m*K	ASTM D5470	0.6±0.1
volume resistance	Ω.cm	ASTM D257	>1.0×10 <sup>12</sup>
EMI attenuation @ 10GHz	dB/cm	-	22.5
Volatility (TML)	%	ASTM E595-07	<0.25
Volatility (CVCM)	%	ASTM E595-07	<0.05
flame retardancy	/	UL94	V-0
Operating temperature range	°C	GB/T 2423.22	-40~150

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.

