

Wector® HAR Series

High-frequency microwave absorbing materials

Wector® HAR series microwave absorbing material is independently developed by Wave-Vector New Materials, formulated with self-developed absorbers and silicone rubber. Its functional absorber is a thin-light soft magnetic filler engineered for reflection attenuation of high-incidence surface waves, covering frequencies from 100 MHz to millimeter-wave band.

This flexible composite uses high-temperature-resistant silicone rubber elastomer as the bonding substrate, blended with ceramic powder, soft magnetic particles, oil-resistant and flame-retardant additives. It delivers both outstanding microwave absorption and thermal conductivity performance.

Product Features & Advantages

- Soft, shatter-resistant, thin and lightweight; easy to cut and process, suitable for installation in confined spaces
- Insulating material; optimal absorption performance is achieved 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

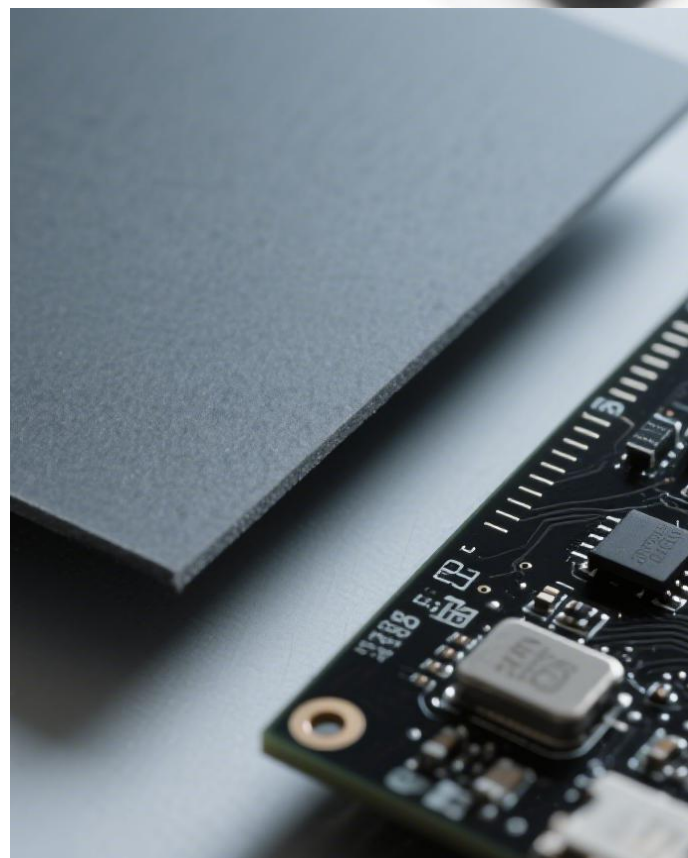
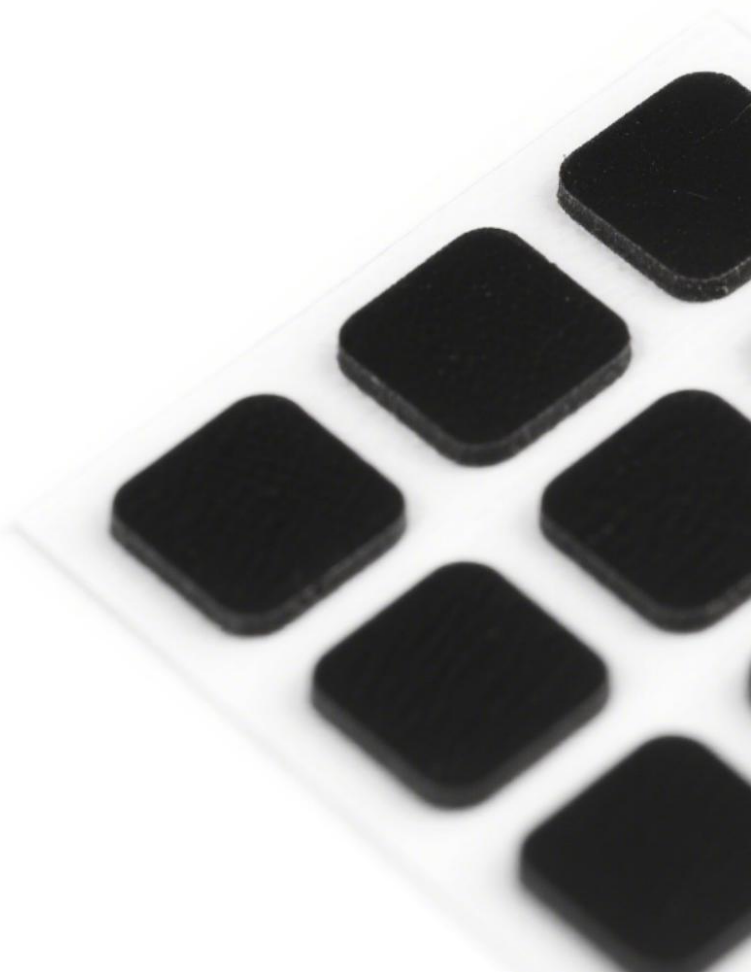
- Commercial Communications: Base stations, optical modules, routers, switches, etc.
- Industrial Electronics: Automotive electronics, UAVs, etc.
- Instrumentation & Measurement: Filters, test systems, etc.
- Security & National Defense: Radar systems, aerospace applications

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 dimension: 300 mm × 300 mm
- Die-cut shapes customizable per 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 ⁻³	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 ¹²
EMI attenuation @ 10GHz	dB/cm	-	17.5
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.

