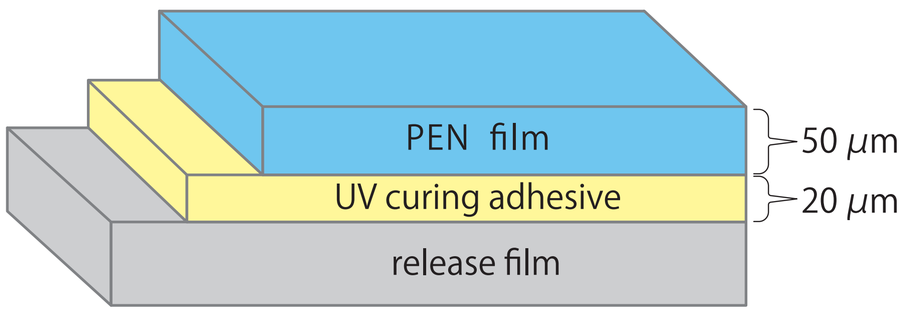
Development product

Heat resistant dicing sheet

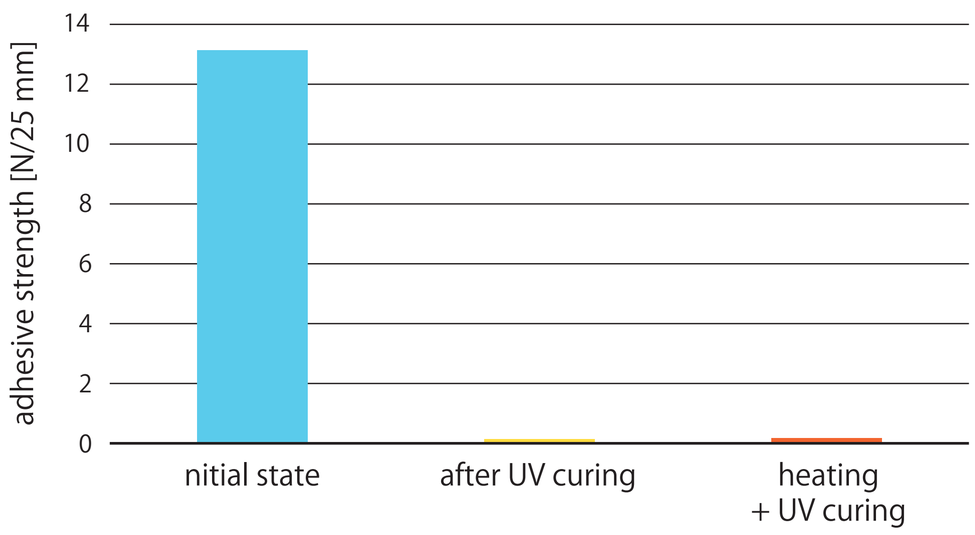
A UV-curable dicing sheet with excellent heat resistance
that can be used in semiconductor manufacturing processes.

PEN type



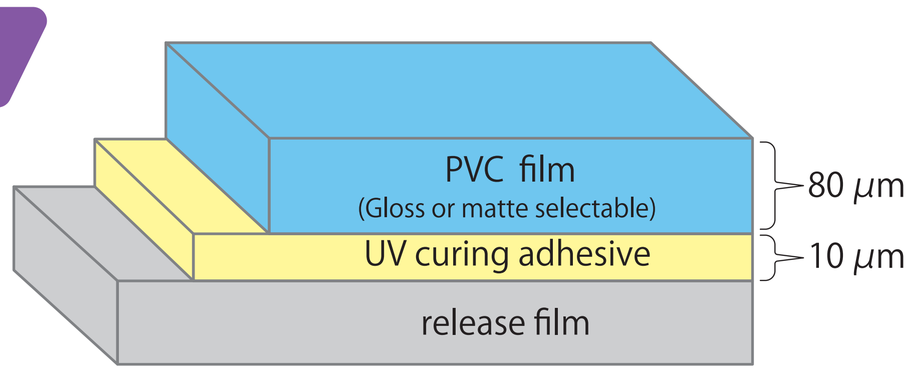
	adhesive strength [N/25 mm]
initial state	13.0
after UV curing	0.06
heating + UV curing	0.10

※Properties are not guaranteed values.



Even if heated at 260℃ for 1 minute, the adhesive strength after UV will decrease to the same level as without heating.

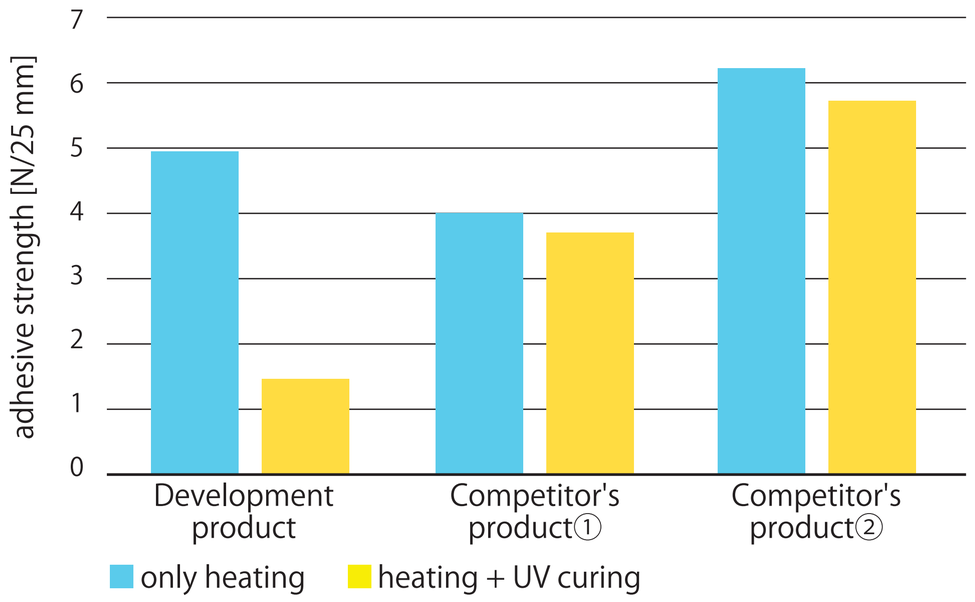
PVC type



	adhesive strength [N/25 mm]	
	only heating	heating + UV curing
Development product	4.9	1.5
Competitor's product①	4.0	3.8
Competitor's product②	6.1	5.6

※Properties are not guaranteed values.

【 Adhesive strength after 1 hour at 120℃ 】



※Additional properties
adhesive strength before heating [N/25mm]
initial state：3.7, after UV curing：0.2
breaking strength [N/10mm]=29.6 elongation rate[%]=340

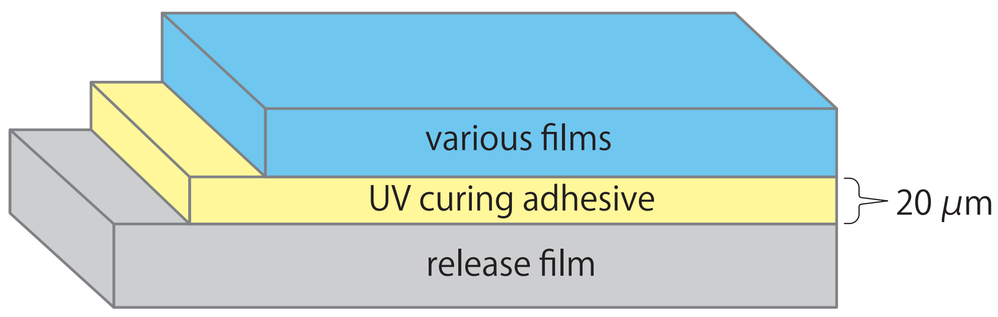
UV curing performance does not deteriorate even when heated at 120℃ for 1 hour.
And it has higher heat resistance than other companies' products.

UV-LED compatible dicing sheet

Development product

A sheet for semiconductor processing
that is compatible with UV-LED irradiation equipment.

Structure



Features

1 Cost

Production costs can be reduced by extending the lifespan of LEDs and significantly reducing power consumption.

2 Quality

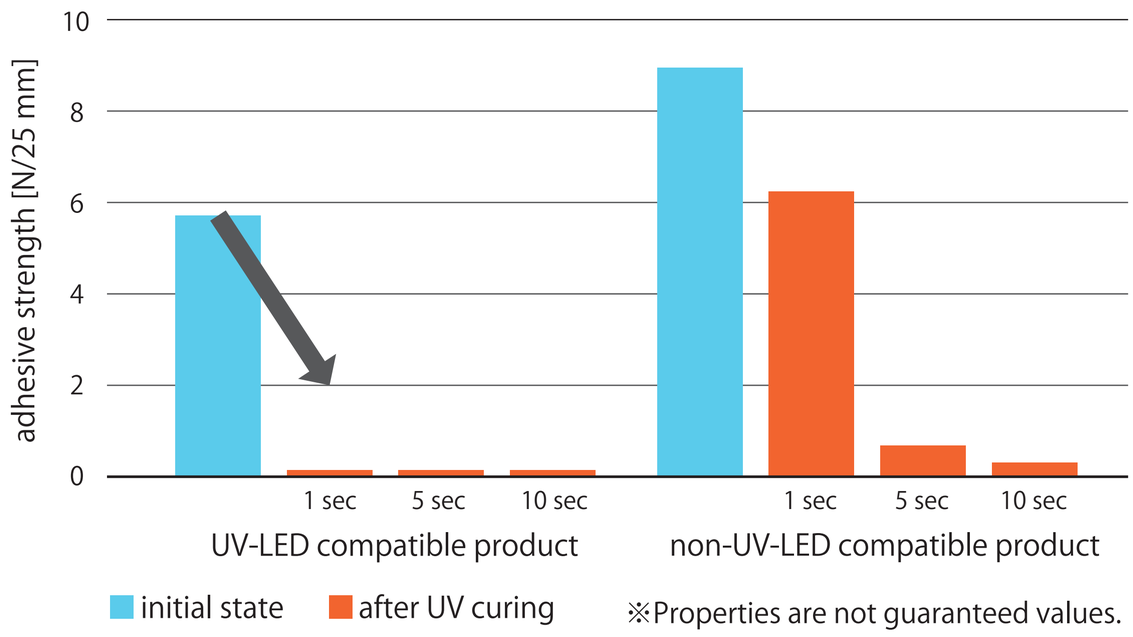
By removing the effects of infrared rays,
you can reduce heat damage and improve product quality.

UV-LED irradiation equipment

3 Efficiency & Environment

Immediate lighting improves work efficiency.
Additionally, since it is ozone-free and does not require exhaust equipment,
it also improves the production environment.

Properties



※Properties are not guaranteed values.

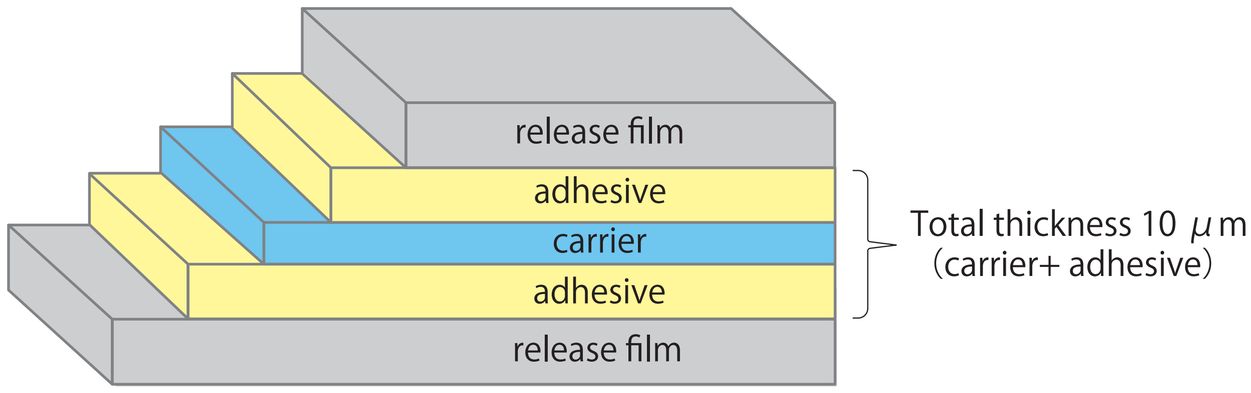
Adhesive strength decreases with short irradiation

Development product

Ultra-thin double-sided tape

Ultra-thin double-sided tape for electronic components with a total thickness of 10 μm.

Structure

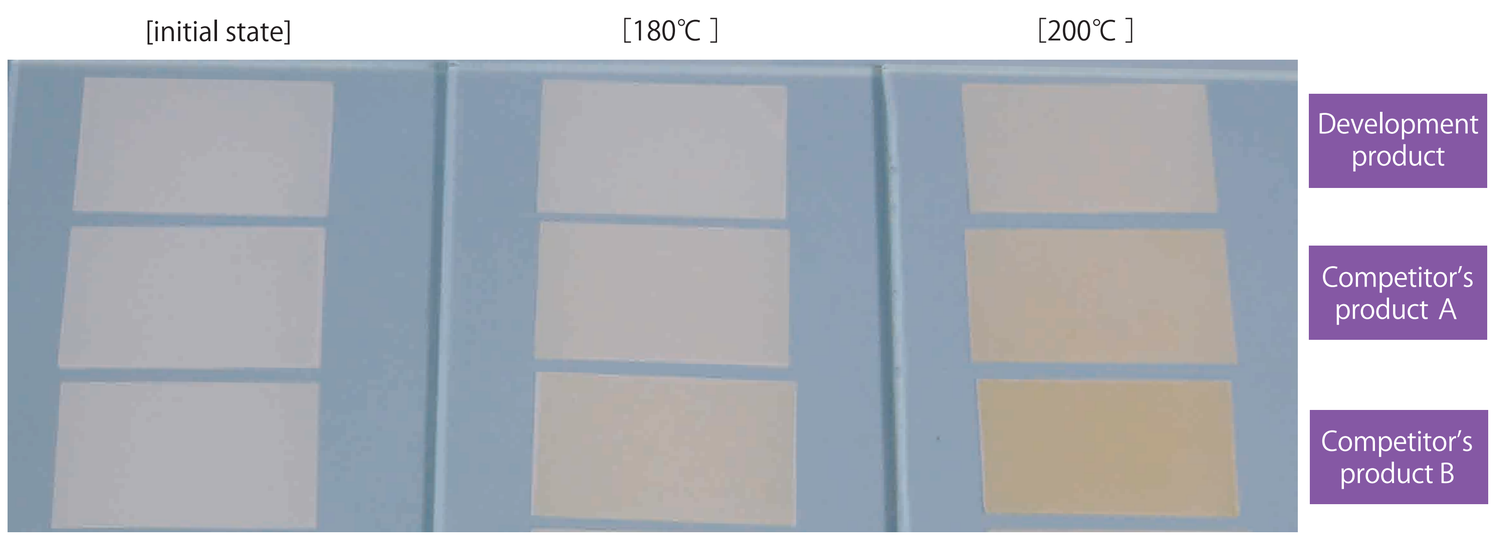


Features

1 Although it is a very thin adhesive tape, it has strong adhesion.
In addition, since the carrier is flexible and strong,
so it has high followability.

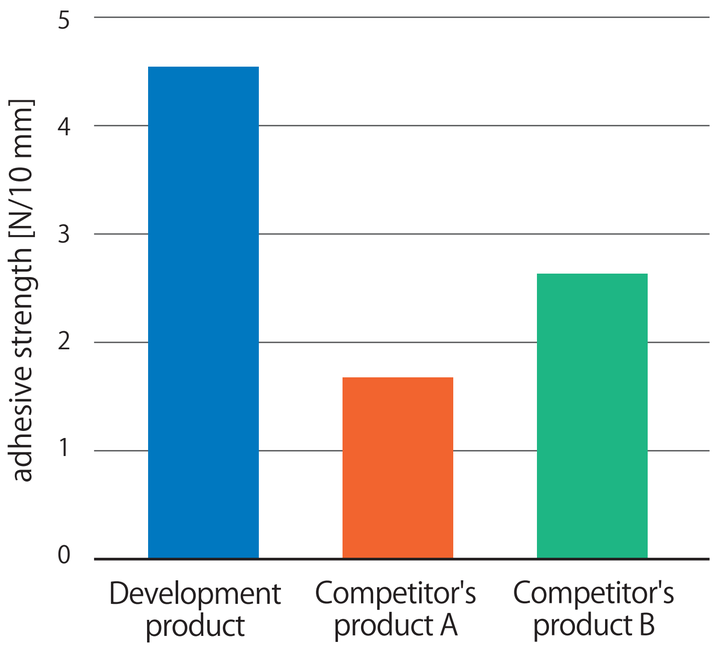
2 It does not easily shift even under load and has excellent heat resistance.

3 Even when heated at high temperatures (180℃ to 200℃),
there is little discoloration and it is not noticeable even on white plates.



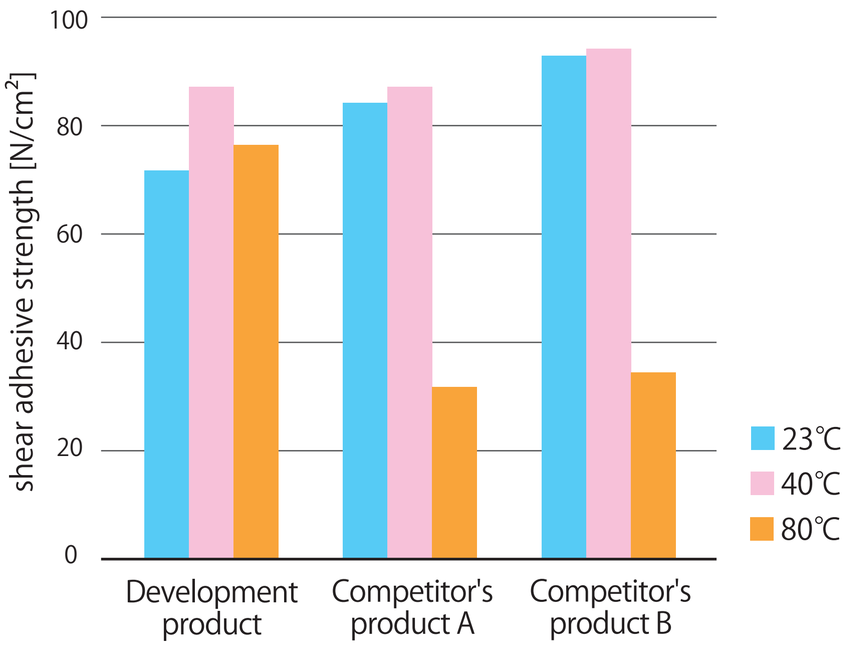
Properties

【adhesive strength】



Strong adhesive
even though it is thin

【shear strength】



Maintains high adhesion
even when heated

※Properties are not guaranteed values.

Developing

Low Dielectric Adhesive

A low dielectric adhesive compatible with high frequency communication

What's low dielectric?

Evolution of mobile communication systems

Applications

The adhesive is expected to be used in next-generation high-speed communication components such as circuit boards and antennas.

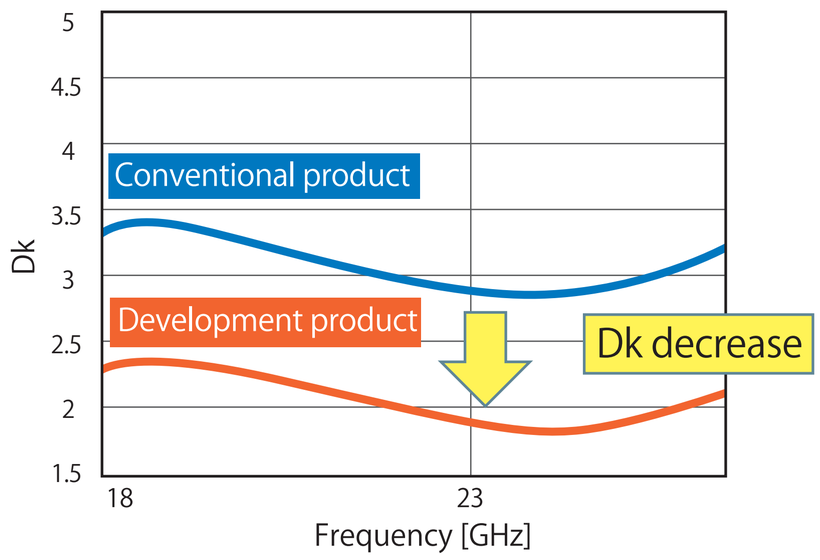
Properties

Lower dielectric constant than our conventional products.
Possible to achieve both low dielectricity and adhesiveness.

Dielectric properties

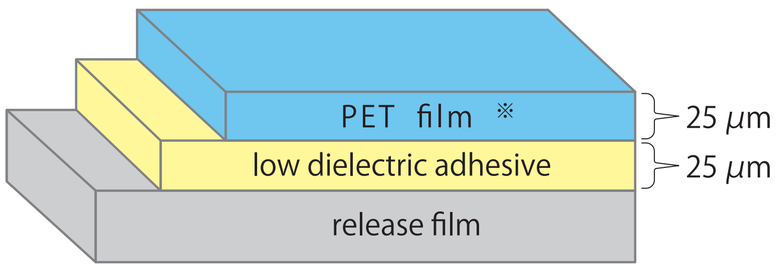
		Development product	Conventional product
Dk	18GHz	2.3	3.5
	22GHz	2.0	3.0
	25GHz	1.9	2.9

measurement method: free space method



Adhesive properties

structure



※Used only for measuring adhesive properties

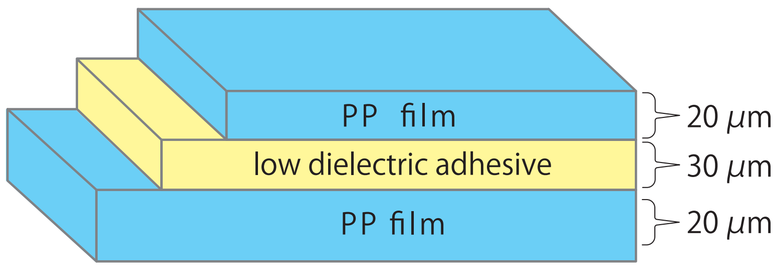
adhesive strength [N/10mm]	2.3
holding power [mm]	0
ball tuck [No.]	7

※Properties are not guaranteed values.

Dielectric properties

Almost no frequency dependence, exhibits similar low dielectric properties up to high frequencies

Structure



※Structure for measurement.

Dielectric constant / Dissipation tangent

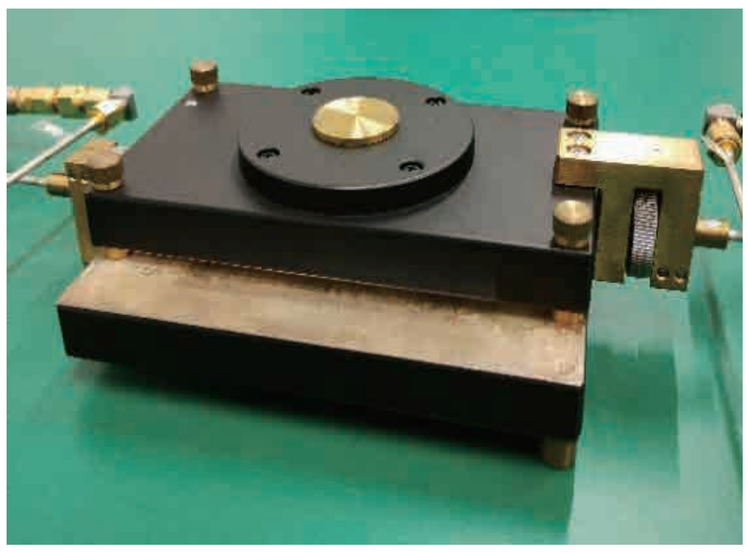
The following data was measured using the resonator method.

	3GHz	15GHz	28GHz	60GHz	80GHz
Dielectric constant	2.39	2.32	2.38	2.38	2.38
Dissipation tangent	0.013	0.011	0.011	0.011	0.011

※Measurement data arithmetically excludes the value of PP film.

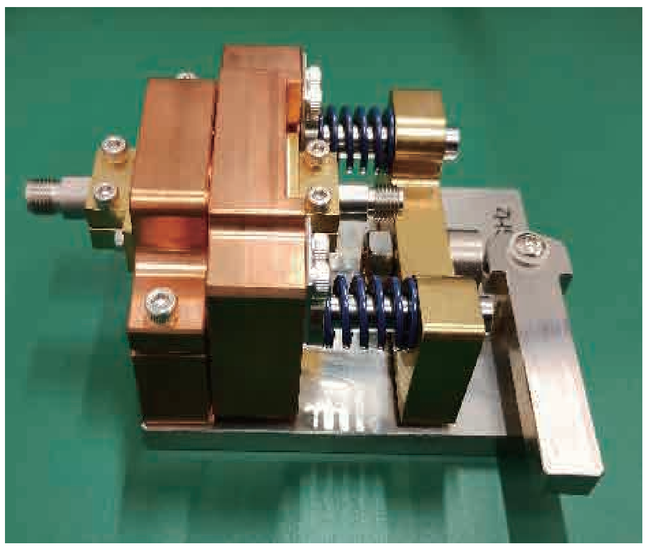
※Properties are not guaranteed values.

Split Post



3GHz、15GHz

Split Cylinder



28GHz、60GHz、80GHz