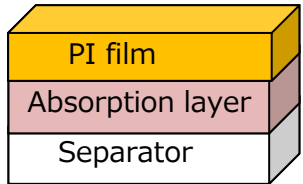


New Products Microwave absorption sheet NIKRAM

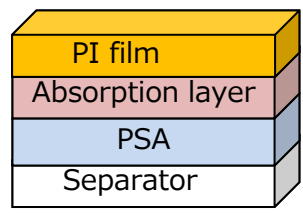
❖ Feature

- Thinnest noise absorption sheet as of 42.5μm for standard type, 52.5μm with PSA.
- Absorb electric field noise, different from conventional magnetic field type.
- Absorption property dose not drop even at high frwquency band.
- Processing method can be selected from heat press or PSA.
- Possible to use befor parts mounting because of maching for reflow and plating process.
- UL-94VTM-0 equivalent, Halogen free.

❖ Product composition



Standard type



With PSA

❖ Microwave absorption properties

1. transmission attenuation power ratio R_{tp}

• Test method: Acc. IEC-62333

$$R_{tp} = 10 \log \left\{ \frac{10^{S_{21}/10}}{1 - 10^{S_{11}/10}} \right\}$$

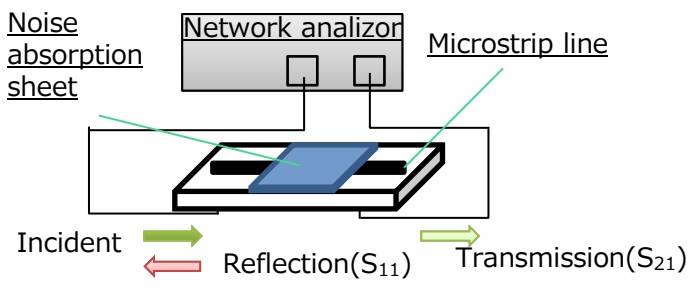
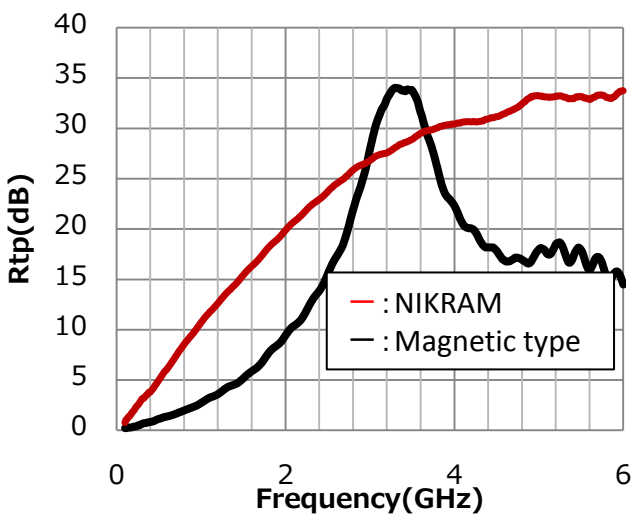
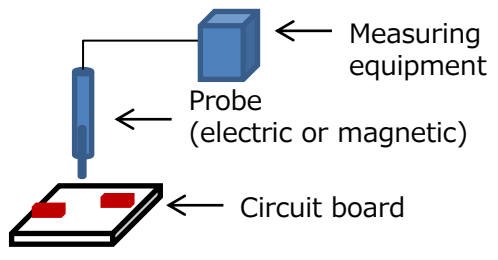


Figure: Measuring system image

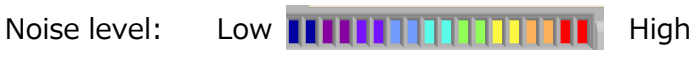


2. Near field probe test



- Test condition
- Frequency: 1MHz to 1.5GHz
- Gap between porobe and circuit board: 5mm

	Circuit board only	With NIKRAM	With magnetic field type
Electric field			
Magnetic field			



New Products

Microwave absorption sheet

NIKRAM

❖ General properties

• PSA processing

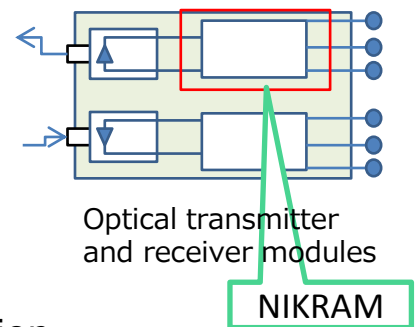
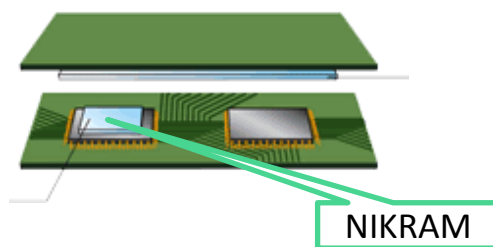
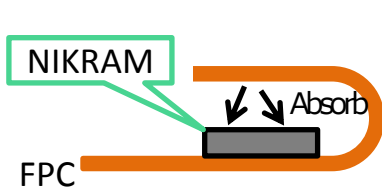
Items	Unit	Adherend	condition	PSA 10 μ m
Adhesive strength	[N/15mm]	Al plate	A	5.3
		FR-4 L-6504	A	5.4
Heat resistance	-	-	E-1000/80	Pass

• Press processing with standard type(160 $^{\circ}$ C4MPa60min press)

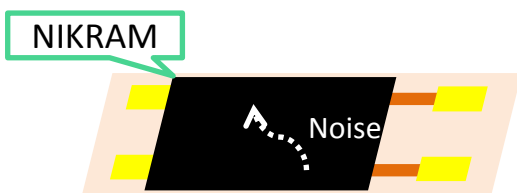
Items	Unit	Condition	NIKRAM
Peel strength	N/mm	A	0.4
		E-1/200	0.3
		D-1/100	0.4
Heat resistance	-	E-240/150	Pass
Reflow resistance	-	C-96/23/65	Pass
		C-96/40/90	Pass

❖ Use cases

Interference suppression



Cross talk suppress



Radiated noise prevention

