

UV Addition Type Optical Bonding Silicones

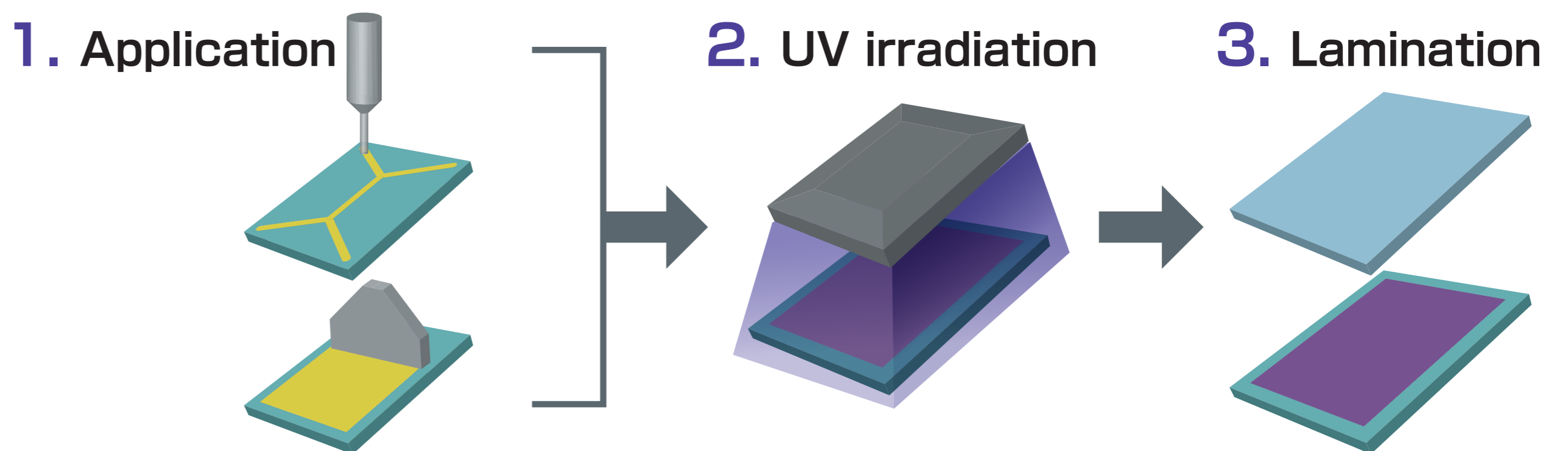
LOCA = Liquid Optical Clear Adhesive

Features

- One-component, so mixing is not necessary.
- Step cure: $3,000\text{mJ}/\text{cm}^2 + 23^\circ\text{C} \times 2\text{h}$ ※Recommended light source: UV-LED(365nm)
- The risk of color unevenness is small and heat resistance to discoloration is excellent.
- Because of the use of UV addition type, lamination after UV irradiation is possible.
- LOCA curability can be ensured even in dark areas such as shadow areas.

■ Use of LOCA

Lamination process using UV addition cure type's "delayed cure" property



Application Examples

Touch panel of a car navigation system



■ Heat resistance reliability test data of KER-4550

Parameter		Condition	Initial	95°C×1,000h	85°C/85%RH×1,000h	40°C⇔85°C/h ×1,000 cycles
Yellow index*			-0.20	-0.21	-0.24	-0.31
Transmissivity @400nm t=310μm %			>99	>99	>99	>99
Color	L*		103.0	102.6	102.6	102.6
	a*		-0.00	-0.06	-0.07	-0.01
	b*		-0.11	-0.14	-0.16	-0.18
Hardness penetration			32	30	32	29
Adhesion strength (glass/glass) t=230μm MPa			0.42	0.41	0.42	0.39

*YI ASTM E313

(Not specified values)

Optical Silicone Encapsulant

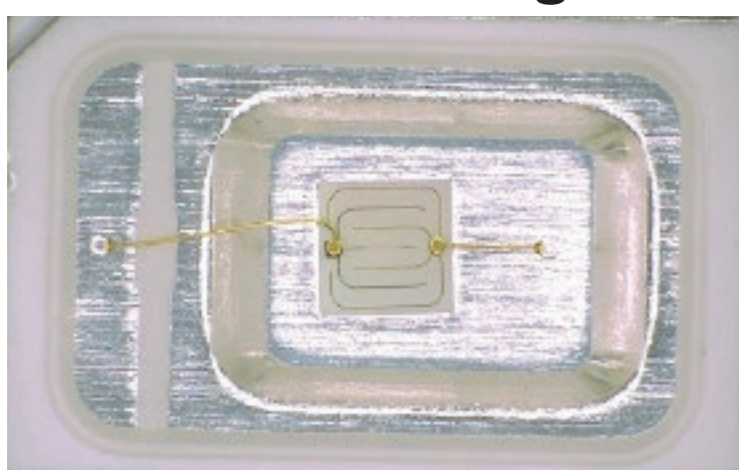
SCR-4016-A/B

Features

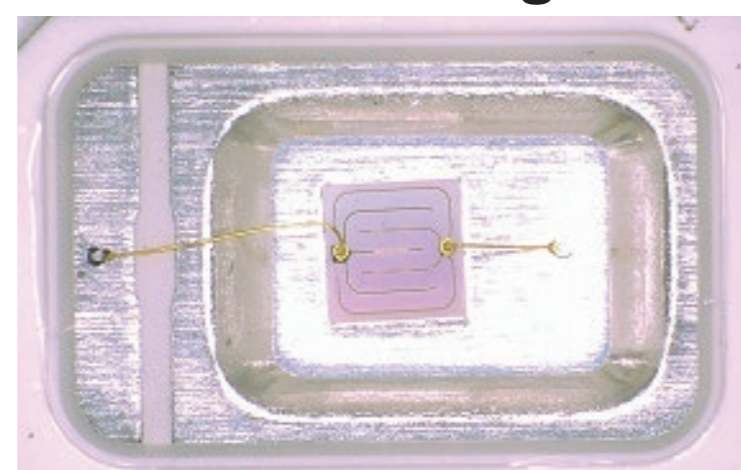
- UV addition cure type silicone two-component mixing type
- Step cure: $3,000\text{mJ}/\text{cm}^2 + 80^\circ\text{C} \times 1\text{h}$
※ Recommended light source: UV-LED (365 nm)
- High hardness type Hardness: Shore D 68
- Excellent gas barrier properties

■ SCR-4016-A/B Sulfurization Test Results

Before testing



After testing



Test conditions:
70°C × 72 h in a sulfur atmosphere

No change

UV Cure Black Silicone

KER-4700BK-UV

Features

- UV cure radical polymerization type silicone one-component type
- Estimated light intensity: $4,000\text{ mJ}/\text{cm}^2$
※ Recommended light source: metal halide lamp (365 nm)
- High hardness type Hardness: Shore D 70

■ KER-4700 (BK)-UV light transmissivity (thickness: 2 mm)

