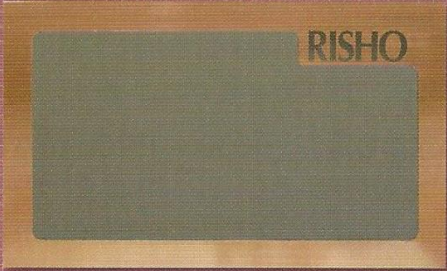


RISHOLITE

光を通さない黒色プリント配線板材料
CS-3667B

CS-3667B is RISHOLITE CCL with excellent IR shielding property, and also has excellent general properties as PWB material.
We expect CS-3667B will be used as Sensor substrate installed in smartphones, tablet PCs ,home appliances or automotive electronics.



▲CS-3667Bの外観イメージ

CS-3667B

Features

1. High Glass Transition temperature (Tg Point): 215℃ (DMA method)
2. IR transmittance of the black color type is almost 0%

Application

1. Optical sensor PWBs
2. LED PWBs
3. All-purpose PWBs
4. The tools that are required to low warpage (Unclad laminates)

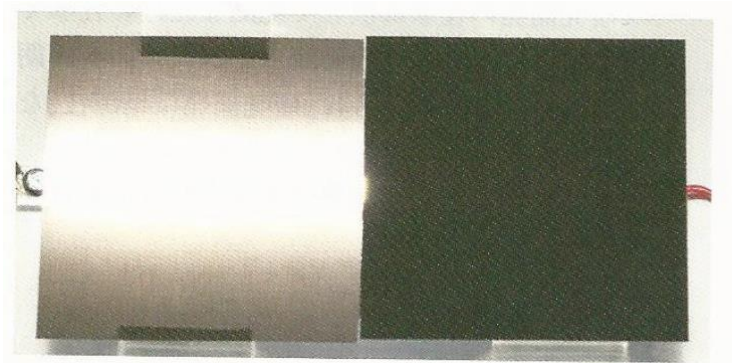
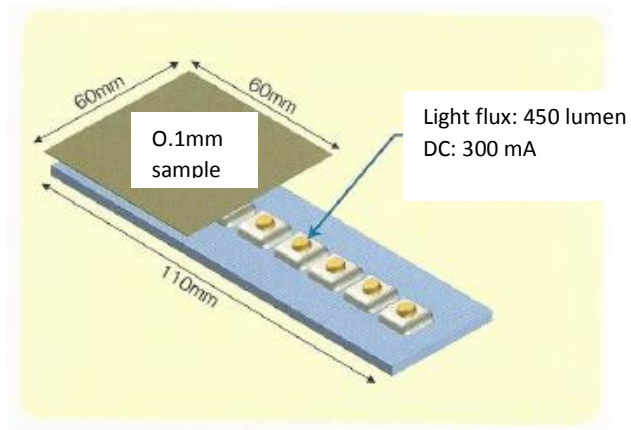
Properties

Test Items		Unit	CS-3667B
Dk	1MHz	-	4.9
Df	1MHz	-	0.012
Peel Strength	18um	kN/m	0.8
Solder Limit	260℃	Sec.	120<
CTE	X/Y	ppm/℃	13/13
Tg		℃	215
Decomposition Temperature		℃	383
UL Flammability		-	V-0 equiv.

Example

CS-3667B prevent the transmissive of any visible light, IR, also NIR (650 to 1310nm), which is commonly used as for sensor device, from one side to the other. Besides it has also high reflection feature.

Below image is a reference of 450 lumen LED (DC: 300mA). 9 pcs are aligned in one line, then covered by the 0.1mm sample.



Black colored FR4

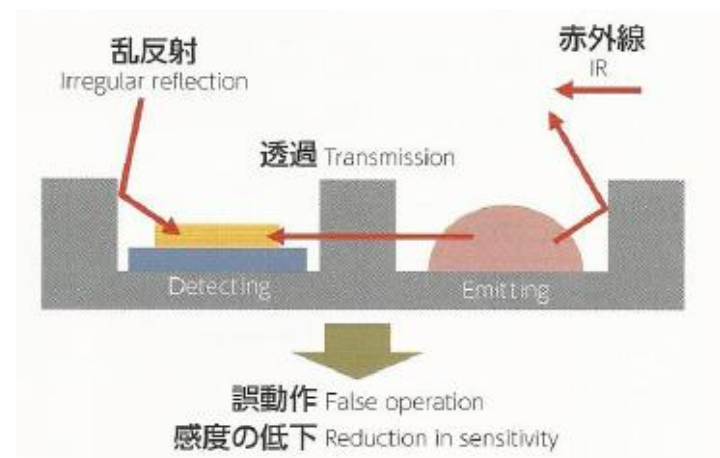
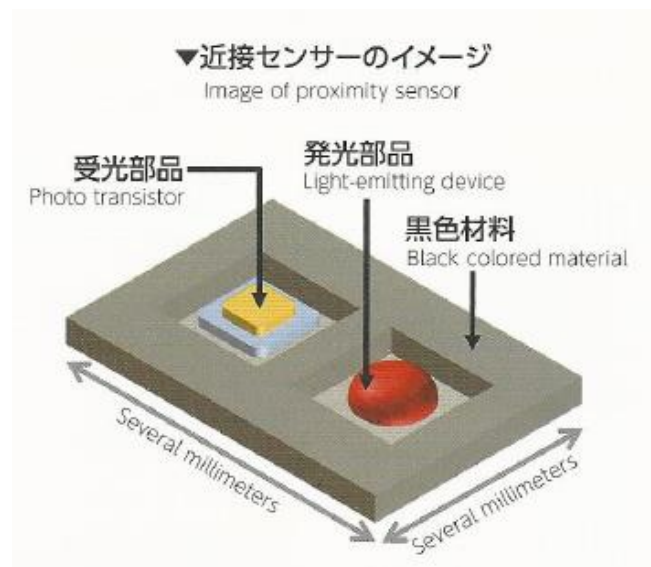
CS-3667B

Brightness of 9pcs of 450 lumen LED is not possible to look by the naked eye, but as described in the image that CS-3667B completely shield the LED light.

Sensor device

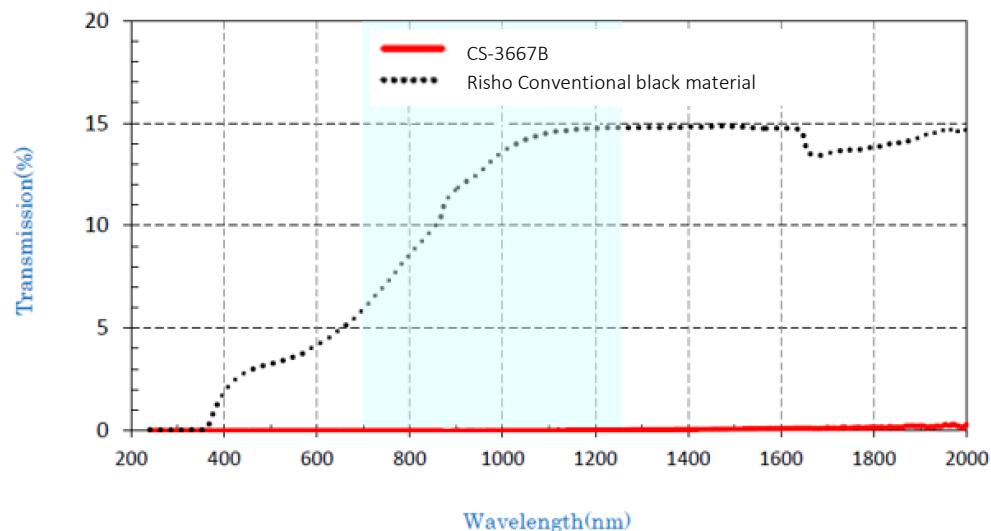
To avoid the malfunction of the sensing of Light-emitting device and Photo transistor, which is assembled together on the PWB, black colored material are well used since it has the feature to absorb the light.

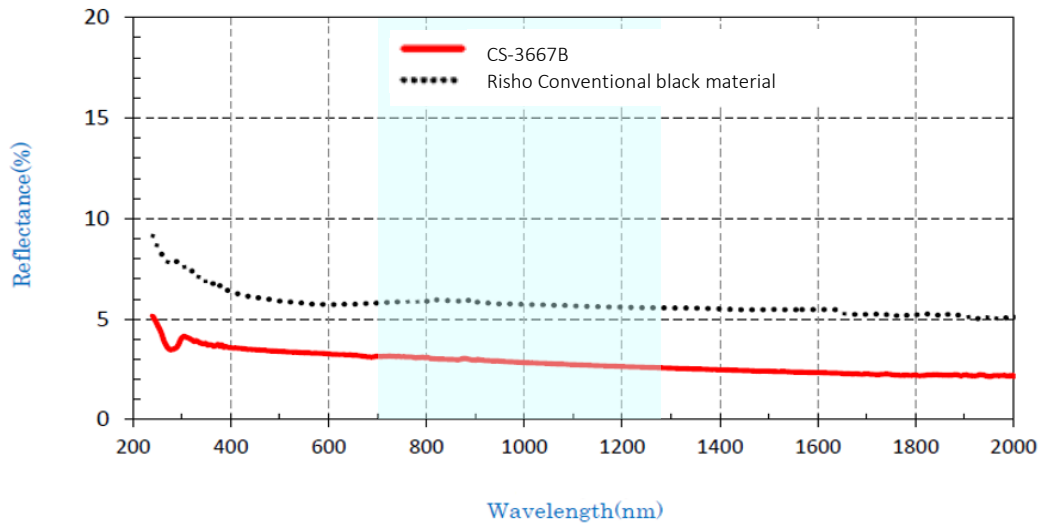
However the sensor is able to detect the light which is not visibly confirmed and that light is able to transmit through these materials.



Below chart indicate the light Transmission and Reflection of CS-3667B. Wavelength of NIR which used for sensor is 650nm to 1310nm. CS-3667B has high shield feature as well as low reflection in this range.

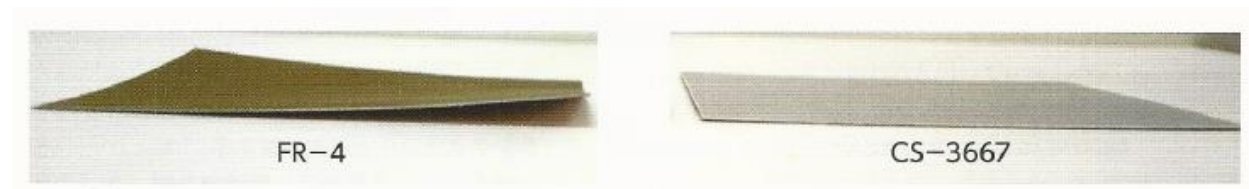
*Copper is removed by etching.





Low twist feature

Not only the CS-3667B has function of high Tg and Low CTE material, but it also has the feature of low twist and bending feature.



This feature would be solution for the product design and also the quality control.

Please feel free to contact us for any inquiry.

Company: Sweetec Ltd.

Address: Nächstental Strasse 21 D-79346 Endingen

Phone: +49 (0) 7642 9254264

Mailto: hikotaro.yasumura@sweetec.eu

Website: www.sweetec.eu