

Conductive Bonding Film

CBF - 300

Bonding a metallic reinforcement plate such as SUS to FPC (Flexible Printed Circuit) is indispensable for a component mounting area. the CBF-300 can bond them together, and enable Copper foil to connect to GND electrically, the CBF-300 is only for FPC.

As bonding GND circuit in FPC to a metallic reinforcement plate electrically can stabilize the electric potential in GND, mounting element performance could become stable and electromagnetic noise from circuit could be suppressed.

This should be the best tool to fight noise for component mounting FPC such as camera module and Liquid crystal (L.C.) module.

Features

Keep stable-electronic joint

Stable-electronic joint between various metallic materials, such as SUS, Copper foil and Gold plating.

Offering a stable electronic bond

Excellent adhesiveness

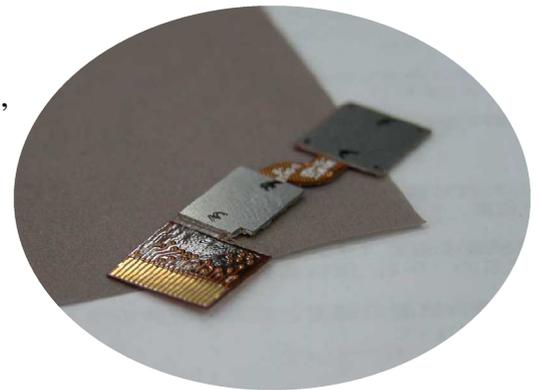
to various metallic materials: SUS, Copper, Gold,
and various plastics: PI, FR4, PET

Support reflow-soldering

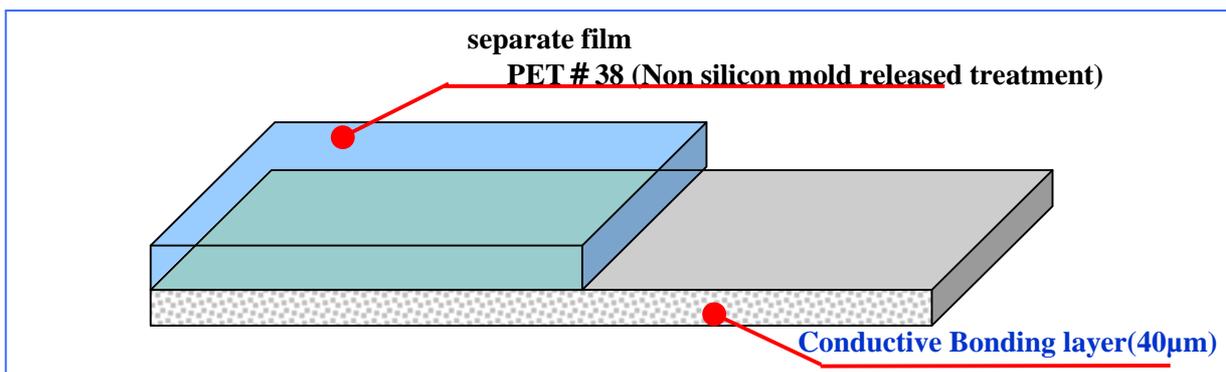
Lead-free soldering is also applicable because of excellent heat-resistance thermosetting binder.

Compliance with an environmental regulations

Halogen-free and comply with RoHS Directive

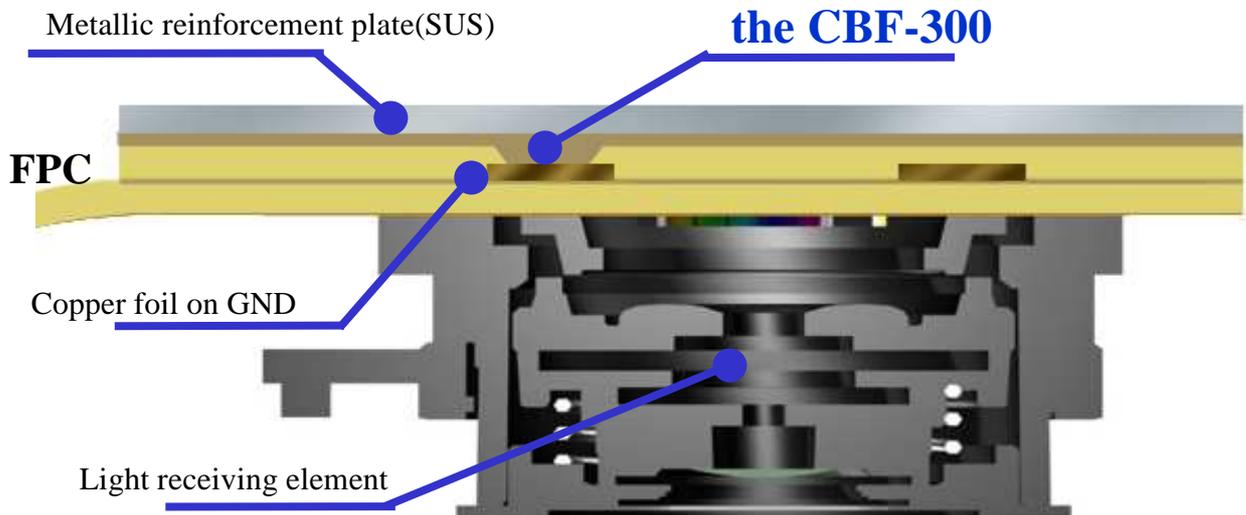


Cross sectional structure



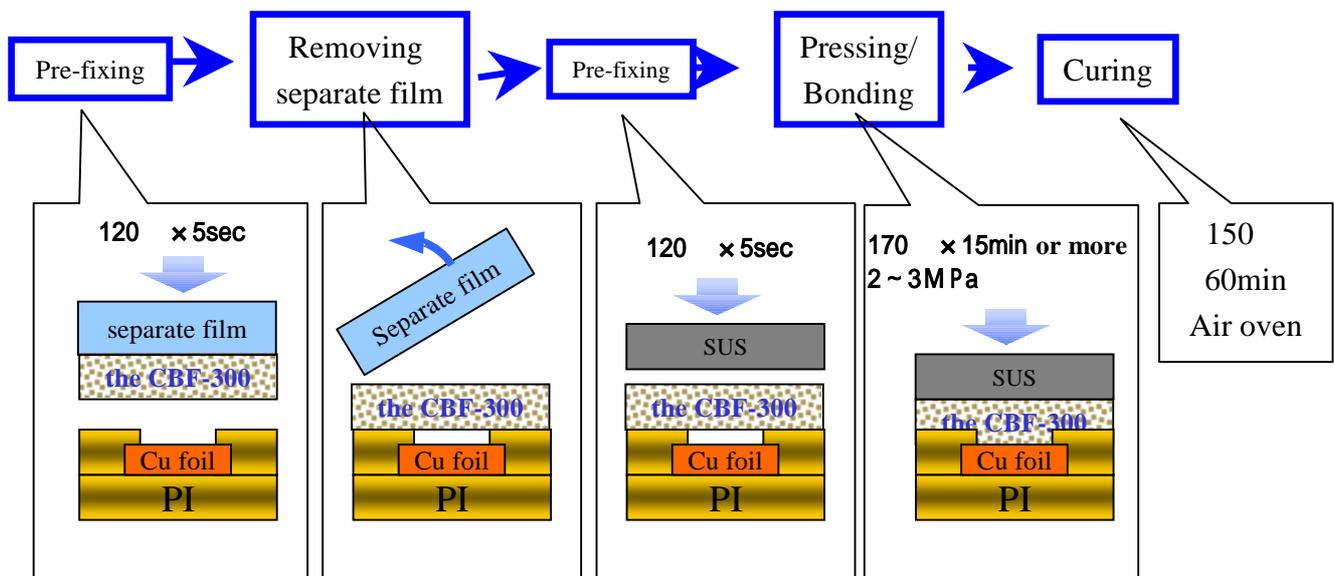
Application sample (Camera module for cellular phone)

Copper foil on GND and Metallic reinforcement plate (SUS) are bonded together with the CBF-300 for grounding Metallic reinforcement plate.



Reprocessing process (Condition)

You can hot press the the CBF-300 with a hot press machine that is used in a production line.



***Please set the reprocessing condition taking your material into account, because of the bonding condition depending on materials.**

***When the pressing time is 30 min or more, curing is not requested.**

SUS: Metallic reinforcement plate

Product specifications

Item	Specifications
Product thickness (excluding Separate film)	40±5μm
Separate film (PET#38 Non silicon mold released treatment)	38±4μm
Product length	50-200mm± ¹ ₀
Product width	249±1mm
Handling	Keep in cool (2-10°C)
Valid Thru	Four months after production

Standard Curing Condition *1

Step1	Temperature	160-180° C
	Time	15-60 min
	Pressure	2-3 Mpa
Step2* ²	After Curing	150C ° x 60 min

***1 Please set the reprocessing condition taking your material into account, because of the bonding condition depending on materials.**

***2 When the pressing time is 30 min or more, curing is not requested.**

Features

Category		Properties
Electric property	Joint resistance between gold plated electrodes :1.0mmφ	300 m Ω or less
	Surface resistance (only CBF-300 after pressing)	250 m Ω/□ or less
	Percentage change of reflow	20% or less
Adhesion strength	To copper foil including gold plating	10N/cm or more
	To polyimide (Kapton)	10N/cm or more
	To copper foil/ polyimide after reflow	10N/cm or more
Liability	Heat resistance(85 ° C), Percentage change of resistance 500h	20% or less
	Moisture resistance(60 ° C x 95%), Percentage change of resistance 500h	20% or less
	Heat resistance(85 ° C), Adhesion strength 500h	10N/cm or more
	Moisture resistance(60 ° C) x 95%, Adhesion strength 500h	10N/cm or more

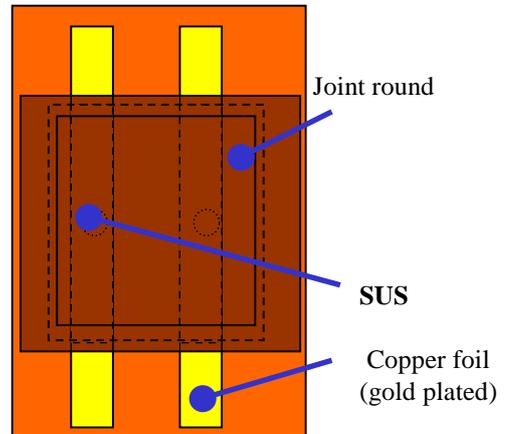
The above assessment data dose not indicate guaranteed values.

Reference

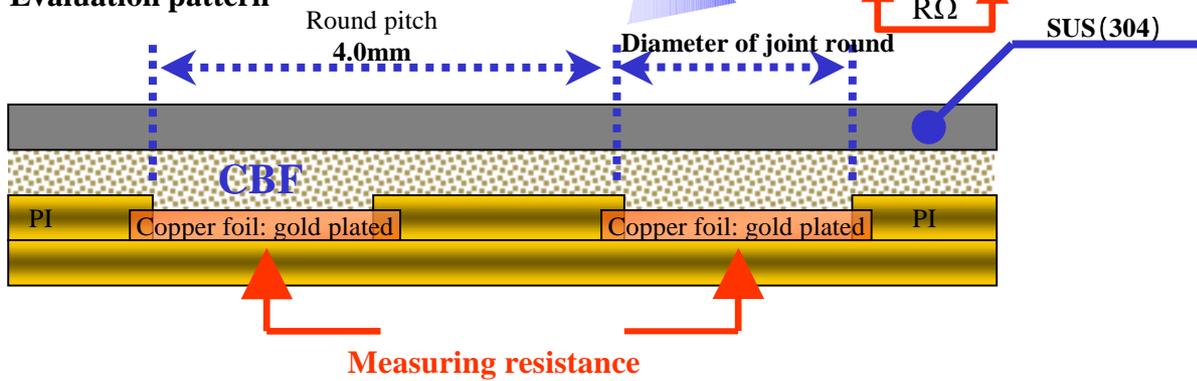
Joint resistance between gold plated electrodes

Diameter of joint round	Before reflow	After reflow
1.8mm	130 m	130 m
1.4mm	150 m	150 m
1.0mm	190 m	200 m

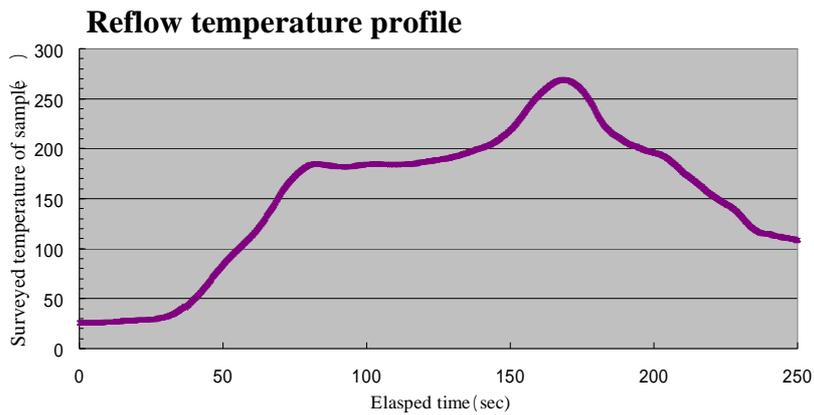
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Evaluation pattern



Reflow test condition



Peak temperature : 265°C
 Lead free is applicable.
 Pass: 3 times