



1 JoinBond™ series ?

“JoinBond” is liquid polymer having thermal conductive property & adhesive function and is used as heat problem solution material.

“JoinBond” can reduce thermal resistance due to liquid type. This is very convenient because it can stick two parts without any physical linking tool. Thanks to superior insulation property, “JoinBond” can block we electrical interference between components. This is also useful for protection components from mechanical shock, because it has superior resilient property as well.

“JoinBond” is room temperature curing type, is cured by reaction with moisture in the air. Thus, packaging is provided in the form without the external air inlet, such as a cartridge.

“JoinBond” is applied at Computer, Cell Phone, LED Module, LED Lamp, CPU, GPU, Power TR, Memory Module.

“JoinBond” is environmentally friendly, so it is no harmful to human body and could be used at lots of industries.

2 Main Characteristics ;

- ◆ Various Thermal Conductivity [1.0~4.0W/m.K]
- ◆ Adhesive Properties : Adhesion to Metal
- ◆ Insulation Property
- ◆ Flame Retardant : Equivalent to UL94-V0
- ◆ Environmentally Friendly [meet Halogen Free, EU-RoHS]

3 Applications of JoinBond™ series

CPU, GPU, LED Module, LED Lamp, SMPS, Note-book, LCD TV, PDP TV etc.
(Adhension between the Electric Parts that generate heat and the heat sink/case)



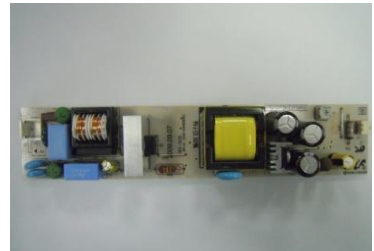
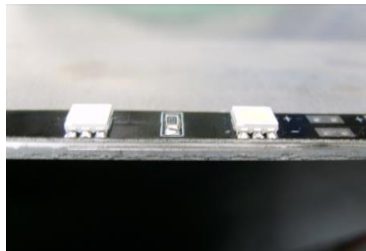
<CPU / GPU>



<LED Lamp / Module>



<SMPS / Power Supply>



4 Properties

EU-RoHS, Halogen Free

Classification	Unit	M-10	M-20	M-30	M-40	Test Method
Applying type	–	Non Self-sticky, Adhesion to the substrate				–
Composition	–	Silicone & Ceramic				–
Color	–	White	White	White	White	–
Product /curing type	–	1 Part, cured at Room temperature				–
Surface Harden Time	Min	20	90	120	120	–
Harden Time (at RT)	–	48 hours	48 hours	72 days	72 days	–
Viscosity	poise	1,000	Paste	Paste	Paste	ASTM D2196
Adhesive Strength (Substrate : Metal)	MPa	2.0	2.0	1.0	1.0	JIS K6850
Density	g/cm ³	1.8	2.5	2.7	2.9	ASTM D792
Hardness (Shore A)	–	60	70	80	80	ASTM D2240
Thermal Conductivity	–	1.0	2.0	3.0	4.0	ASTM D5470
Breakdown Voltage	KV/mm	Min. 15	Min. 15	Min. 15	Min. 15	ASTM D149
Withstand voltage (4.5KV/mm)	sec	Min. 60	Min. 60	Min. 60	Min. 60	ASTM D149
Volume Resistance	Ω.cm	Min. 10 ¹¹	Min. 10 ¹¹	Min. 10 ¹¹	Min. 10 ¹¹	ASTM D257
Flame Retardant	–	Equivalent to UL94-V0				UL94
Environment	–	Halogen Free, Meet EU RoHS, Lead Free				–
Storage	–	3 month (0~10℃)				–

* RT : Room Temperature

Above specifications are only for reference and can be changed without notice.

5 Packing

◆ 330cc Plastic / Aluminum Cartridge



Plastic Cartridge



Aluminum Cartridge

◆ Carton Box Packing

Box size : 200(W) X 250(L) X 345(H)

1 Box = 20 Cartridge

6 Product List (How to Order)

• P/N : JoinBond - TC - M - 10
Type Conducting Type Harden Type Thermal Conductivity
(Thermal Conductive) (Room Temperature) (10 : 1.0W/m.K)