



KM1210

**One Component,Low Temperature Curing,
Thermally Conductive Epoxy Adhesive**

The KM1210 products are single component low temperature curing epoxy conductive silver glue. The KM1210 products have the characteristics of high shear strength, low modulus of metal, ceramic; basic, silicon chip, green good adhesion etc.. The products have excellent storage stability, low curing temperature, low ionic impurities, good electrical and mechanical properties of the cured products.

Applications:

Products are widely used in VCM camera module, PCB board, FPC, integrated circuits and other substrates or processes can not withstand high temperature baking conductive connection. Applicable to the narrow, dip in the glue operation process, can realize the low temperature fast curing, high connection strength.

Typical Properties:

KM12010 Type	Item	TEST METHOD	TYPICAL PROPERTIES	
UNCURED PROPERTIES	Viscosity@25℃ (Brookfield DV-Ⅱ +CP@ 5 prm)	ASTM D1084-97	KM1210HK	KM1210HK-J182
			12,000 cP	32,000 cP
	Thixotropic Index@ 25℃@ (0.5rpm/5 rpm)	ASTM D1084-97	5.5	5.6
	Warpage, μm	0-50μm	<10	<10
	Silver content	By weight	82%	87%
	Work Life@ 25℃	-	9hour	9hour
	Shelf life	-	>6month	>6month
			@ -5℃	@ -25℃
	Cure Process Data	DSC, 10K/min	90min@ 80℃	60min@ 90℃
PHYSIOCHEM ICAL PROPERTIES- PSOT CURE	Volume electrical resistivity (Ω*cm)	ASTM-D2397	<0.0008	<0.0006
	Shear strength@ 25℃	ASTM-D412	> 24 Kg/die	> 26 Kg/die
	Tensile strength@ 25℃	ASTM-D412	> 2500 psi	> 2600 psi
	Thermal conductivity@ 121℃	ASTM-E1461	6.5 W/mK	50 W/mK
	Glass Transition Temperature℃	DSC, 10K/min	70	80
	Coefficient of thermal expansion<Tg	TMA	55ppm/° C	45ppm/° C
	Thermal decomposition temperature,℃	TG, 10K/min	>300	>300
APPLICATIONS			Camera module, other low temperature process	
Note	1.Unpacking: Transfer the syringes from the dry ice to a -5℃ freezer without ANY delays. 2.Storage: This product should be stored at -5℃. If stored at these conditions, adhesive may be usable for up to half a year. degrade the performance of the material in both handling (e.g. dispensing) and final cured properties. 3.Thawing: Allow the container to reach room temperature before use. After removing from the freezer, set the syringes vertically for thawing. Syringe thaw time, less than 30 grams: 30min; more than 30 grams: 60 min. Syringe packing need not stir, Jar has to be 15 to 30 minutes.(must stir up and down to make the silver powder evenly) 4. Applicatin Guidelines: Thawed adhesive should be immediately placed on dispense equipment for use. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminants and/or air into the adhesive. Adhesive must be completely used within the 8-hour period. 5. Packing: 50cc (50g) 、1000cc (1000g)			

APPLICATIONS:

