



TIM AT2M

NEW THERMALLY INTERFACE MATERIALS

- * **THERMALLY CONDUCTIVE FORMULATIONS**
- * **VERY HIGH THERMALLY CONDUCTIVE VALUE**
- * **FORMULATIONS CONTAIN SILVER PARTICLES AS A FILLER**

GENERAL DESCRIPTIONS:

Amepox materials **TIM AT2M** is the single component, thermally conductive formulations contain silver particles as a filler. This formulation has as low as possible epoxy resin as a fluid component for improvement of mechanical junction properties. Silver particles have the highest metal purity and size less than 10 µm.

TIM AT2M have very high and stable thermal conductivity with value of several times higher as today commercial available TIM's material. Both, can be used by screen, stencil or dispenser application methods. Stable junction properties needs sintering of silver particles during typical thermal process at temp (180 – 200)°C.

SPECIFICATIONS:

	TIM AT2M
Number of components	One
Consistency	Medium low viscous paste
Colour	Dark silver
Percentage of silver (after sintered process)	90% b.w.
Viscosity	24 400 mPas (*)
Thixotropy index (1/10 rpm)	5,3
Recommended sintering conditions in convection oven	(180) °C – 60 min.
Pressure during sintering process	5kg/cm ²
Storage	2 months in temperature less 15°C (do not freeze)

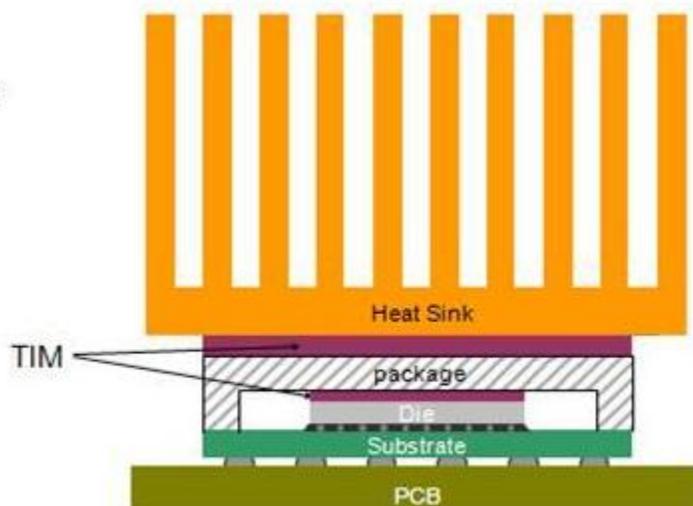
(*) - Brookfield LVDVII + CP; 10 rpm; 20°C.

TECHNICAL PROPERTIES (*):

	NanoTIM 10p
Thermal conductivity value	37 ± 9 W/mK
Electrical resistivity	3x10 ⁻⁴ Ωcm
Specific gravity	3,2 ± 0,2 g/cm ³

(*) - Typical value to number of tests.

Typical application for the new TIM AT2M material is interface between semiconductor chips (or other elements) which generate heating, and radiators for removing heat flow outside of electronics circuits or electronics devices (see example of the picture below).



ATTENTION:

1. Product is ready for use, but sometimes should be mixed. **INSURE THAT THE TIM AT2M IS AT ROOM TEMPERATURE WHEN YOU WILL START WORKING WITH.**
2. **Sintering temperature, time and pressure is important for silver particles sintering reason.** Use paste with adequate ventilation.
3. Use latex gloves for protection your hand. Nano silver is difficult for removing with its' very small size reason.
4. Avoid skin and eye contact. If ingested, consult a physician immediately.
5. Clean by alcohol, MEK or other suitable solvents.

This information is based on data and tests believed to be accurate. **AMEPOX Microelectrocnis** makes no warranties (expressed or implied) as to its accuracy and assumes no liability in connection with the use or inability to use this product.

(TIM AT2M)