

FACT SHEET

ICT-AP60



The ICT-AP60 series is a very cost-efficient, electrically not insulating silicone free high-performance phase-change material, which is used as a thermally conductive carrier of a so-called aluminum substrate. An efficient thermal connection to the contact surfaces is only possible, however, by the implementation of an absolutely uniform coating of the ICT- Ap60 phase change material on both sides of the substrate liner.



PHASE CHANGE MATERIALS (ELECTRICALLY CONDUCTIVE)

DESCRIPTION

ICT-AP60 is a very cost-efficient, electrically not insulating high-performance phase change material, which is used as a thermally conductive carrier of a so-called aluminum substrate. An efficient thermal connection to the contact surfaces is only possible, however, by the implementation of an absolutely uniform coating of the ICT- Ap60 phase change material on both sides of the substrate liner. Through the development of this unique formulation, the ICT- Ap60 already offers a very efficient thermal transmission by phase change at normal operating temperatures, where a uniform connection line is maintained during the expansion process. The result is that air is efficiently expelled to the outside and any surface irregularities or flatness conditions that are present on the interface can be minimised.

ICT-AP60 can also be produced by several consecutive, innovative and technically mature production steps in different material thicknesses (ICT-AP60-L10-Al2-H) and with the inclusion of other other aluminium substrate thicknesses.

With this thermal interface solution, for example, IGBT power modules, discrete semiconductors, LEDs, microprocessors or any other type of heat generation can be successfully deheated. With the different available material thicknesses it is also possible to cover a wide range of isolated power supplies. Only through efficient and reliable contact connection between heat generation and heat sink can an optimal thermal be carried out in the heat sink or the housing tray.

FEATURES

- › Thixotropic/prevents compound run-out (bleeding)
- › Low-cost "drop-in-place" solution
- › Fully customer-centric, centered for specific requirements
- › Low Thermal Impedance
- › Excellent mechanical and dielectric properties
- › Solutions for many types of surfaces
- › Excellent substitute for thermal compound

DELIVERY FORMS / APPLICATIONS

- Other coating thicknesses available upon request
- Roll lengths and widths available according to customer requirements (starting from 15 mm width)
- Available in roll form, dimensions according to customer specifications (DROP&PLACE) with or without partial adhesive liner, both variants deliverable on a roll, also continuously one-sided adhesive available
- Fast, clean, and process-safe pre-assembly through partial adhesive strips on the outer areas of the TIMs
- Standard sheet sizes: Standard DIN A4 / 30 cm x 60 cm or (40 cm x 60/100 cm)
- In cut-outs and shapes according to customer specifications: Roll / Loose or on carrier (Kiss-cut)
- Depending on customer requirements

TYPICAL PROPERTIES

Operating temperature	from -40 to 140 °C
Thermally conductive	Yes
Thermal conductivity	220 W/m*K
Thermal resistance (inch² / 645,16mm²)	0.05 0.06
Electrically conductive	Yes
Color	White

ICT4TIM Partners



ICT SUEDWERK GmbH
INSPIRED CUSTOMIZED TIM SOLUTIONS

Bajuwarenring 12a • 82041 Oberhaching
Tel: +49 (0)892123102-0 • Fax: +49 (0)892123102-10
Info@ict-suedwerk.de • www.ict-suedwerk.de

