AccuTIM™

Thermally Conductive Silicone Adhesive

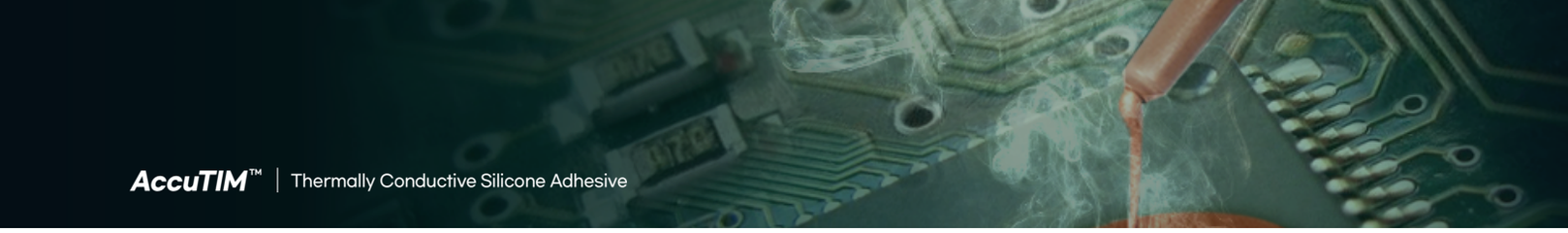
Overview

These days, electronic devices such as mobile devices and laptops are becoming thinner and smaller. Electronic devices also generate a lot of heat by operating various functions. The emitted heat degrades the function of the device and causes malfunction of surrounding devices and substrate degradation, adversely affecting electronic device performance. *AccuTIM*™ is a **highly thermally conductive silicone adhesive with a thermal conductivity of 3.0 W/m·K which can solve the heating problem of electronic devices.**

AccuTIM™ uses a **special filler** developed by the Bioneer to **form a continuous network in the matrix** and reduces the number of thermal resistance junctions to increase the performance of thermal conductivity. In addition, *AccuTIM*™ is based on silicone polymer, so it has **excellent heat resistance, cold resistance, weather resistance** and **insulation properties** compared to other organic polymers

Features and Benefits

- *AccuTIM*™ is mixture of special fillers developed by the Bioneer and has a high thermal conductivity of 3.0 W/m·K.
- *AccuTIM*™ is paste, and it is easy to apply to various types of heating elements such as large spaces between heat sources and heat sources or uneven areas.
- *AccuTIM*™ is can be cured at room temperature, and can be cured in a short time by heating at a low temperature of 60℃.
- *AccuTIM*™ is silicone material that is more resistant to blue and UV rays than conventional epoxies, and is highly resistant to heat and moisture.
- *AccuTIM*™ is can be stored for a long time because the major material and hardener are separated by using a special container. This product is convenient to use because the base material and hardener are automatically mixed.



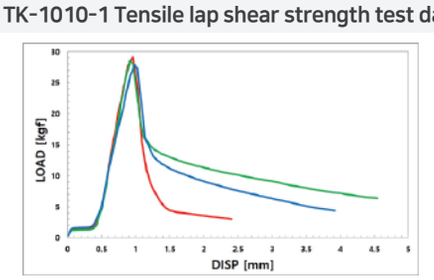
Field of Application

- It can be used for bonding various electronic materials that require thermal conductivity (LED, quartz vibrator, piezoelectric element, tantalum capacitor) and as a heat dissipation adhesive for batteries.
- It is used for heat dissipation bonding to electric vehicles, secondary batteries, ESS (Energy Storage System) and power semiconductors, enabling electronic devices to function stably.
- This product can be applied to electronic assemblies in various industries that require heat dissipation, such as the automobile industry, energy facilities, medical equipment, communications, and aerospace.

General Properties

Cat. No.		TK-1010-1	
Curing method		2-component Room Temperature Vulcanizing (RTV)	
Before Curing			
Appearance	A Part & B Part : Brown Paste	**Viscosity**	A Part & B Part : 30,000 cps
Mixture ratio	100 : 100	**Tack free time**	3hr (Room temperature)
Standard curing conditions	Room Temperature x 24hr 60℃ x 1hr	**Storage conditions**	Room temperature
After Curing			
Thermal conductivity		3.0 W/m · k	
Tensile strength (25℃ x 24h)		32.43 Psi / 0.22 MPa	

TK-1010-1 Tensile lap shear strength test data



Test conditions of tensile lap shear strength
* Curing conditions : 25℃ x 24h
* Adhesive surface : 25 x 50 mm

* The above test results are tensile lap shear strength analysis data, and the average result value is 32.43 Psi.

Ordering Information

Cat. No.	Product Name	Size	Price (VAT excluded)
TK-1010-1	*AccuTIM*™ Thermally Conductive Silicone Adhesive	14ml, 14ml	$ 45.0

* Please inquiry for bulk orders.

Technical Support and Ordering

For any detailed product information or to place an order, please e-mail nano-support@bioneer.com.

Contact Us

BIONEER
Innovation • Value • Discovery

Bioneer Corporation
8-11 Munpyeongseo-ro, Daedeok-gu
Daejeon, 34302, Republic of Korea
Tel: +82-42-930-8777 (Korea: 1588-9788)
Fax: +82-42-930-8688
E-mail: sales@bioneer.com

Bioneer Inc.
155 Filbert St. Suite 216
Oakland, CA 94607, USA
Toll Free: +1-877-264-4300
Fax: +1-510-865-0350
E-mail: order.usa@bioneer.us.com

Bioneer R&D Center
Korea Bio Park BLDG #B-702
700 Daewangpangyo-ro, Bundang-gu, Seongnam-si
Gyeonggi-do, 13488, Republic of Korea
Tel: +82-31-628-0500
Fax: +82-31-628-0555