

The epocal thermal solution provider

The efficient thermal structure with Mirco Heat pipe & Thermal Interface Material

THERMAL SOLUTIONS WITH MICRO / NANO TECHNOLOGY

1. MTRAN (MICRO HEAT TRANSMITTER)

MTRAN with micro technology is a flat (or round) and slim shaped heat pipe. It has many usages for every type of electronic devices also LED application especially for slim, small and light weight products such as LED TV, LED Projector, and LED LIGHTING even more application.

2. NANOTIM (Thermal Interface Material)

NANOTIM is the silicone-based thermal interface material made from a silicone fluid with thermally conductive material and metal oxide fillers. TTM can offer varios type of thermal interface material such as High-Conductivity Phase Change Materral, Thermal Grease, and Silicone Pad with adhesive etc...

1. MTRAN (MICRO HEAT TRANSMITTER)

- General Information

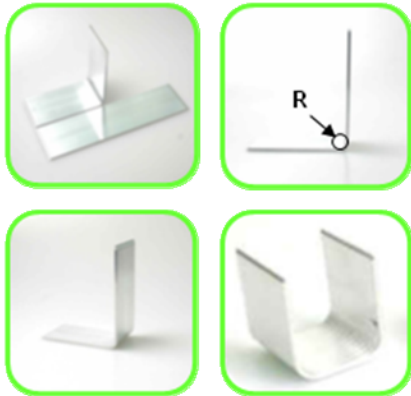
ITEM	Description
Material of Container	Aluminum 1050
Wick Structure	Groove
Working Fluid	Acetone
Operating Inclination, θ	0 ~ 90°
Leak Temperature Criterion	170 □

- General Specification

Part Number	Thickness	Width	Length	Qmax	Material
TMT-1220B Series	1.2	20	60-200	5-18	
TMT-1223A Series	1.2	23	60-200	5-18	
TMT-1550A Series	1.5	50	60-300	18-80	

TMT-1630C Series	1.6	30	60-300	11-77	Al
TMT-2040A Series	2.0	40	60-300	40-170	
TMT-2550A Series	2.5	50	60-300	75-300	
TMR-0060A Series	6.0	60	60-300	25-90	

● Min. Bending R Value



Part Name	Min. Bending R	Shape
1220B	R2	L-Shape U-Shape Z-Shape
1223A		
1550A	R3	
1630C	R4	
2040A	R5	
2550A	R6	
0060A	R12	

2. NANOTIM

2.1 NANOTIM PCM

- General Information

PCM is designed to meet the need of customers in solving the heat problem from the electronic component such as high-end CPUs, GPUs, FB-DIMM and custom ASICs chips. PCM is a wax-based phase change material made from a paraffin wax with thermally conductive material and metal oxide fillers. The product offers high thermal conductivity, virtually no wide operating bleed or evaporation over temperature range. Over the transition temperature (45°C), PCM changes solid to soft state. Especially it has superior wetting and low viscosity properties and so effectively fills the microscopic surface of the component, resulting in very low thermal resistance. PCM is an efficient thermal coupler, effective and positive heat sink sealers and heat transfer agent. PCM is very stable at elevated temperature. It does not dry out, separate or settle. So it is superior reliable properties at temperature range. PCM is easy handling, flexible and sticky properties for their pad-like at room temperature. PCM is also to meet all environmental requirements including RoHS.

2.2 NANOTIM SPS

- General Information

NANOTIM SPS series are an ideal thermal interface material specially designed for heatsink attachment to heat source like Chip set, and other plastic encapsulated components with excellent thermal conductivity cushioning and gap-filling properties. It is also suitable for mounting heat spreader onto power converter and motor control PCB. SPS series also meet all environmental requirement including RoHS.

2.3 NANOTIM APS

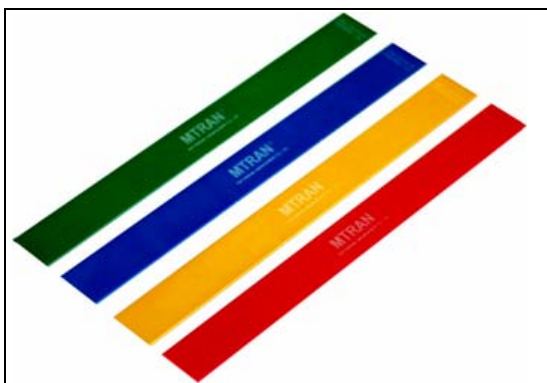
- General Information

NANOTIM APS is designed to meet the need of customers in solving the adhesion problem from thermal conductivity pad and provide high thermal conductivity from components to heat sink. NANOTIM APS is designed for bonding heat sink or cooling device to a wide variety of heat generating electronic components and consists of a ceramic-filled adhesive film that eliminates the need for mechanical fasteners.

2.4 NANOTIM TGS

- General Information

TGS series are the superior thermal interface material with NANO-dispersion technology to mix the silicon fluid and high performance NANO powder, which can help the thermal dissipating of electric components. TGS thermal compound is a silicone-based thermal grease made from a silicone fluid with thermally conductive material and metal oxide fillers. The product offers high thermal conductivity, virtually no wide operating bleed or evaporation over temperature range. TGS series has low viscosity and easy handling properties to comparable grease. So it easily coats the surface of the component. Especially it has superior wetting properties and so completely fills the microscopic surface of the component, resulting in very low thermal resistance. TGS series is an efficient thermal coupler, effective and positive heat sink sealers and heat transfer agent. TGS series is very stable at elevated temperature. It does not dry out, settle or harden. So it is superior reliable properties at temperature range. TGS series also meet all environmental requirement including RoHS.



MTRAN (Micro Heat Transmitter)
TTM Co., Ltd.

www.coolttm.com

PRESS CONTACT:

Name: Sean Choi

Function: Team Chief

Telephone: +82-10-6549-3756

E-Mail: sean-choi@coolttm.com