## **PSA TAPE TAT-M-SI**

silicone adhesive, thermally conductive



TAT-M-SI is a thermally conductive electrically insulating silicone PSA transfer tape. Through the thermally conductive adhesive the thermal contact is highly improved even at low pressures. Convex and concave surface structures and stack up tolerances are effectively compensated. Materials with different expansion coefficients can easily be bonded. Thus the total thermal resistance is minimised. The tape works well for realizing an effective and cost efficient thermal coupling in a broad field of applications. Above all it is used in applications having little space only and where the permitted weight is limited. Using screws, springs, clips as mechanic fasteners thus becomes superfluous.



Technical Data Sheet

## **PROPERTIES**

- Low thermal resistance
- Thermal conductivity: 1.0 W/mK
- High dielectric strength
- ☐ Reliable strong adherence on uneven or hardly machineable surfaces
- ☐ Neither mixing of components nor curing processes
- Replacement of fasteners e.g. screws clips, etc.

## **AVAILABILITY**

- ☐ Sheet 300 mm x 400 mm
- □ Roll 300 mm x 50 m
- Both side tacky
- Die cut parts

## **APPLICATION EXAMPLES**

Thermal link of:

- CPUs
- □ RDRAM memory modules
- ☐ Flip Chips, DSPs, BGAs, PPGAs
- MOSFETs to heat sinks
- LED

For use in Power supplies / PCs / Telecom engineering / Automotive applications / LED arrays

PROPERTY	UNIT	TAT-M100-SI	TAT-M200-SI
MATERIAL		Ceramic filled silicone PSA adhesive	Ceramic filled silicone PSA adhesive
Colour		White	White
Thickness	mm	0.10 ±0.01	0.20 ±0.02
Peel Off Strength (@ 23 °C) @ Aluminum / @ Glass	N/cm	6.0 / 7.6	6.4 / 7.6
Shear Strength (@ 125 °C after 10,000 hrs.)	N/cm²	> 200	> 200
RoHS Conformity	2015 / 863 / EU	Yes	Yes
UL Flammability	UL 94	V0	VO
THERMAL			
Thermal Conductivity	W/mK	1.0	1.0
Resistance <sup>1</sup>	°C-inch²/W	0.28	0.49
ELECTRICAL			
Breakdown Voltage² (@ Initial Thickness, 25 °C)	kV AC	2.0	5.0

Measurement technique according to: 'ASTM D 5470, '2 ASTM D 149. All data without warranty and subject to change. Please contact us for further data and information.  $Shelf\ life\ adhesive: 6\ months\ when\ stored\ in\ original\ packaging\ at\ room\ temperature\ and\ 50\ \%\ relative\ humidity.$ 

Thicknesses: 0.1 mm / 0.20 mm