







# COMPATHERM

The 5 W/mK Nolato Compatherm® Thermal Interface Material 9451 is a performance product designed for demanding applications requiring high thermal conductivity in a very soft viscoelastic material.

Compatherm® Thermal Interface Material is naturally tacky on both sides, but can be coated on one side to remove the natural tackiness if needed.

## **TYPICAL MATERIAL PROPERTIES**

PROPERTY	TEST STANDARD	UNIT	9451
Color	Visual		Grey
Thickness	ASTM D374	mm	0.30-5
Hardness	ASTM D2240	Shore00	28
Density	Helium Pyncometer	g/cm <sup>3</sup>	3.07
Thermal conductivity	Hot Disk	W/mK	5.0
Dielectric Constant @ 1MHZ	ASTM D150		5.27
Dielectric Breakdown Voltage / mm	ASTM D149	VAC/mm	>5000
Volume Resistance	ASTM D257		9.5*1014
Outgassing, TML	ASTM E595		0.4%
Outgassing, CVCM	ASTM E595		0.1%

<sup>\*</sup>Thickness tolerance, ±10% mm @ nominal thickness greater than 1mm; ± 0.1mm @ nominal thickness less than 1mm.

#### **Please Note:**

Observed performance may vary in certain circumstances.

It is recommended that customers test the material with their specific applications.

# **FEATURES AND BENEFITS**

- 5 W/mK thermal conductivity
- Guaranteed thermal performance
- Competitive price points to other thermal interface materials
- Soft and highly compressible for low stress applications
- Tacky both sides
- Thickness range from 0.5mm to 5mm stocked in the USA
- Offering quick turn converting in the USA and China

## **APPLICATIONS**

- Cooling components to chassis, frame, or other mating components
- Memory modules
- Home and small office network equipment
- Mass storage devices
- Automotive electronics
- Telecommunication hardware
- Radios
- LED solid state lighting
- Power electronics
- LCD and PDP flat panel
- Set top boxes

MODUS ADVANCED TAKES YOU FROM IDEA TO IGNITION











<sup>\*</sup>Thirty second delay value shore 00 hardness scale.





# **COMPATHERM® 9451 THERMAL INTERFACE MATERIAL**

## **DESIGN NOTES**

It is recommended to use the material in up to 20%-30% of compression degree. A compression degree of 50% is possible to use but above that level is a thinner pad recommended. We recommend applying pressure slowly and evenly over the entire surface to achieve the highest performance and lowest thermal resistance.

## **ORDERING COMPATHERM®**

Compatherm® materials are typically cut into custom shapes based on the application requirements. Modus stocks the full line of materials and can provide cut piece and kit prices based on your unique application. Cut pieces can be delivered kiss cut to a liner or through cut.

THICKNESS	SHEET SIZE	THERMAL RATING	NOLATO STYLE#	MODUS PART #
0.25MM	200MM x 200MM	5 W	9451	TM-280-6310
0.5MM	200MM x 200MM	5 W	9451	TM-280-5925
0.75MM	200MM x 200MM	5 W	9451	TM-280-5926
1MM	200MM x 200MM	5 W	9451	TM-280-5927
1.25MM	200MM x 200MM	5 W	9451	TM-280-5928
1.5MM	200MM x 200MM	5 W	9451	TM-280-5929
1.75MM	200MM x 200MM	5 W	9451	TM-280-5930
2MM	200MM x 200MM	5 W	9451	TM-280-5931

## APPLICATION PROCEDURE

- Remove the top blue liner from the top surface of the sheet.
- Remove the cut part from the bottom blue liner.
- Place the part on the desired surface of heat sink, heat spreader or component.
- Compatherm's naturally tacky surface will adhere to the surface without having to apply excess pressure.
- Compatherm should not be removed and reused once it's been applied to a surface.

## CUSTOMERS WHO USE COMPATHERM® MAY ALSO BE INTERESTED IN:

## **EMI SHIELDING**





## CUSTOMERS ALSO SEARCHED:

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#### THE NOLATO GROUP

Nolato is an advanced high-tech polymer partner with operations in Europe, Asia and North America. We develop and manufacture products in materials such as plastic, silicone and TPE. Our customer offering comprises everything from concept development, product design and process optimization to high-volume production, post-processing, assembly and logistics

We are Modus! With multiple locations in North America and China, Modus Advanced, Inc. is a diversified custom manufacturer that converts EMI Shielding, Environmental Gasket Materials, Microwave Absorbers, Acoustic Materials, Thermal Interface Materials and other high performance materials into finished parts. Modus utilizes its 40 years as an established provider of high quality, reliable products to create precisely what customers specify. Innovative processes; custom fabrication utilizing performance materials; an on time delivery record of more than 99% means Modus is well positioned to help your company succeed.

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WWW.MODUSADVANCED.COM •

SALES@MODUSADVANCED.COM