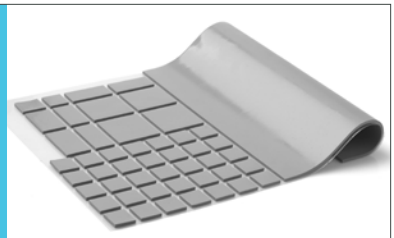
MODUS™
IDEA TO IGNITION™

Nolato
EMC & THERMAL SOLUTIONS

DATASHEET

COMPATHERM® PAD 9431



COMPATHERM PAD

Compatherm® Pad 9431 is a thermal pad designed for applications requiring high thermal conductivity and electric insulation in a very soft viscoelastic material.

This pad 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	9431
Color	Visual		Blue
Thickness[1)]	ASTM D374	mm	0.5-5
Hardness[2)]	ASTM D2240	Shore00	40
Density	Helium Pyncometer	g/cm^3	3.1
Thermal conductivity	Hot Disk	W/mK	3
Dielectric Breakdown Voltage[3)]	ASTM D149	VAC/mm	>8000
Volume Resistance	ASTM D257		3.3*10^{15}
Dielectric Constant @ 1MHZ	ASTM D150		4.07
Outgassing, TML	ASTM E595		0.04%
Outgassing, CVCM	ASTM E595		0.003%
Flammability[4)]	UL94		VO

1) Thickness tolerance, ±10% mm @ nominal thickness greater than 1mm; ± 0.1mm @ nominal thickness less than 1mm.
2) Thirty second delay value shore 00 hardness scale.
3) Measured on 1 mm thickness @20 mA.
4) Flame rating valid for 0.25mm thick samples sandwiched between a PCB and an aluminium plate.

Please Note:
Observed performance may vary in certain circumstances.
It is recommended that customers test the material with their specific applications.

FEATURES AND BENEFITS

- 3 W/mK thermal conductivity
- Electrically insulating
- 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

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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 a thinner gap pad is recommended. Excessive compression may result in silicone oil bleeding. 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 #
0.5MM	200MM x 200MM	3 W/mK	9431	TM-280-5662
1MM	200MM x 200MM	3 W/mK	9431	TM-280-5663
1.5MM	200MM x 200MM	3 W/mK	9431	TM-280-5664
2MM	200MM x 200MM	3 W/mK	9431	TM-280-5665
2.5MM	200MM x 200MM	3 W/mK	9431	TM-280-5666
3MM	200MM x 200MM	3 W/mK	9431	TM-280-5667
4MM	200MM x 200MM	3 W/mK	9431	TM-280-5668
5MM	200MM x 200MM	3 W/mK	9431	TM-280-5669

CUSTOMERS WHO USE COMPATHERM® MAY ALSO BE INTERESTED IN:

EMI SHIELDING

Trishield® COMPASHIELD® WesShield

CUSTOMERS ALSO SEARCHED:

- gap filler
- thermal material
- thermal interface materials
- thermal putty
- thermal conductive pad
- gapfiller
- thermal gap pad
- thermal gap filler
- thermal interface pad
- thermal materials
- thermal silicone
- heat transfer pad
- thermal interface pad
- thermally conductive pad
- silicone gap filler
- conductive pads
- thermal pad material
- silicone thermal pad
- thermally conductive rubber
- thermal conductive pads
- what is a thermal pad

STORAGE CONDITIONS

- The material can be stored one year after reciept at normal room temperature and humidity.

APPLICATION PROCEDURE

- Remove the top PET liner from the top surface of the sheet.
- With fingers remove the die cut part from the bottom PET liner.
- Place the part in the desired surface of heat sink, heat spreader of component.
- The stickiness of the material will assure that it adheres to the surface without need of high pressure.
- Do not press the part too hard when applying it to assure that height of the material is not destroyed.
- Once applied, it is not recommended to remove and re-use the Compatherm part as it has low material stability.
- If needed, peel off the part from the surface by hand and replace it with a new one.

REPAIR PROCEDURE

- At room temperature slide or pull or twist the heatsink to separate it from the PCB.
- After separation, remove both surfaces with a plastic tool to remove the bulk of material.
- Clean both surfaces with tissue wiper.
- Apply a new Compatherm part.

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.

ABOUT MODUS

We are Modus! With multiple locations in North America and China, Modus Advanced, Inc. is a diversified custom manufacturer who 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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