

DATA SHEET OF COMPATHERM PAD 9610

1. Introduction



Compatherm Pad 9610 is high conformable and thermal performance pad material. It has very high thermal conductivity 14W/mK. It can be used for applications where large tolerance differences create the need for compression of the interface up to 50% of its original thickness.

Compatherm Pad 9610 is naturally tacky on both sides, requiring no adhesive coating to inhibit thermal performance.

Features and benefits

- 14 W/mK thermal conductivity
- Available in thickness from 0.75 mm to 5mm

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

2. Typical material properties

Property	Test Standard	Unit	9610
Color	Visual		Dark Grey
Thickness ¹⁾	ASTM D374	mm	0.75-5
Hardness ²⁾	ASTM D2240	Shore00	45
Density	Helium Pycnometer	g/cm ³	2.7
Thermal conductivity	Hot Disk	W/mK	14
Dielectric Breakdown Voltage ³⁾	ASTM D 149	VAC	Electrical conductive
Volume Resistance	ASTM D257		500
Dielectric Constant @ 1MHZ	ASTM D150		NA
Outgassing, TML	ASTM E595		0.4%
Flammability ⁴⁾	UL94		V0

1) Thickness tolerance, $\pm 10\%$ mm @ nominal thickness greater than 1mm; ± 0.1 mm @ nominal thickness less than 1mm.

2) Thirty second delay

3) Measured on 1 mm thickness @20 mA

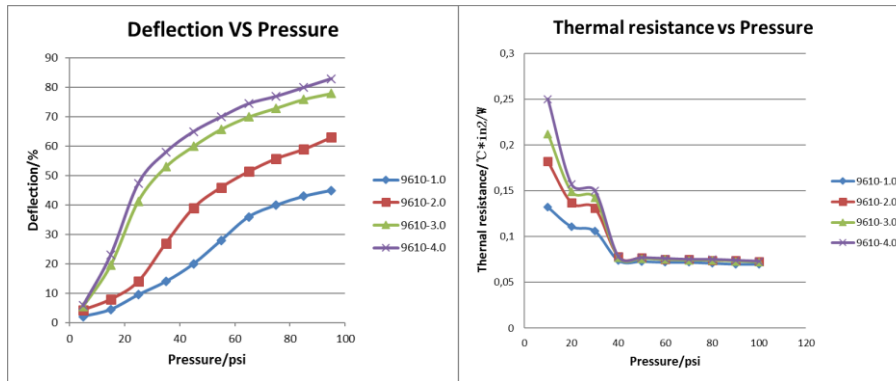
4) Flame rating valid for 0.25mm thick samples sandwiched between a PCB and an aluminium plate

Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application

3. Design notes

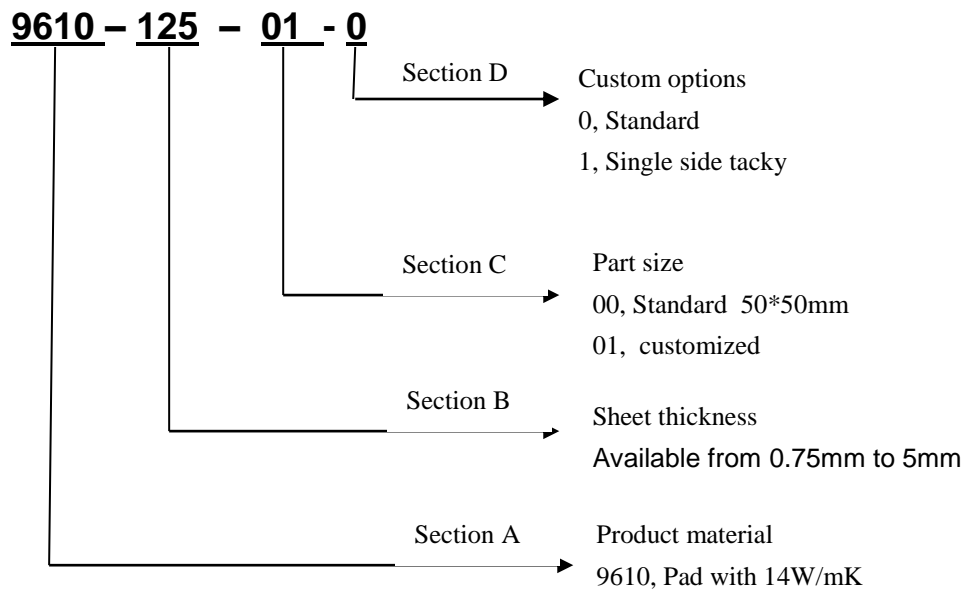
It is recommended to use the material in up to 20%-30% of compression degree. A compression degree of 50% is possible to use but above that level a thinner pad is recommended. Excessive compression may result in silicone oil bleeding. It is also recommended to use one and the the same compression degree over the whole surface for the same reason

Typical compression and thermal resistance vs pressure curve showed as below. The curve value are provided for reference only. Actual application performance is directly related to the surface roughness, flatness, etc.



4. Ordering Compatherm

Compatherm is available as 200x200 mm standard sheets in thickness from 0.75 up to 5 mm. The Nolato part number is shown in the example below.



On request the Comatherm sheets can be delivered with die cut in the customer specific shape for direct application. Please consult the Marketing department of Nolato if this options is requested.

5. Storage conditions

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

