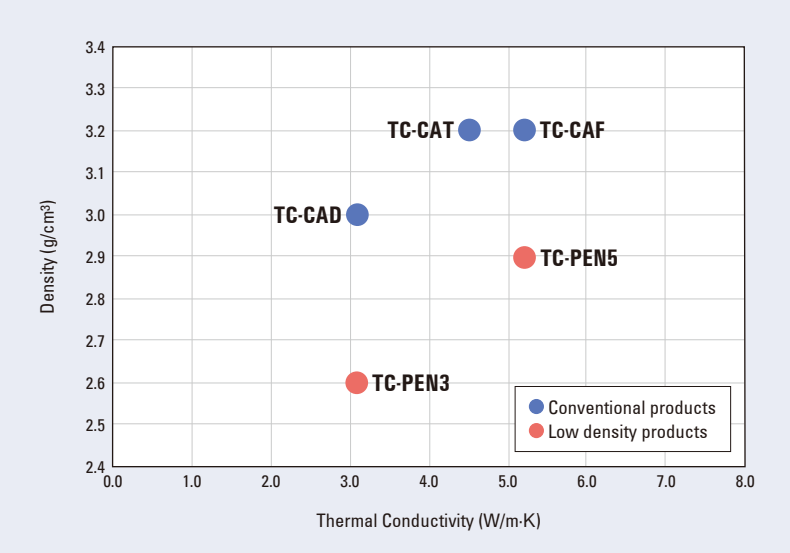
Low Density and Soft Thermal Conductive Pad

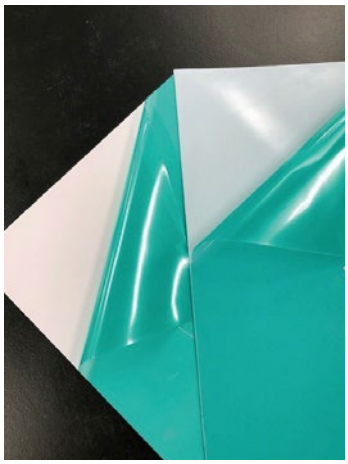
TC-PEN Series

It is a product with significantly reduced density. These silicone pad have excellent thermal conductivity and workability.

1 Features

1) The density is reduced while maintaining the same thermal conductivity and handleability as conventional products.
2) Suitable for cooling of in-vehicle equipment and other parts that require weight reduction.





2 Applications

1) Large area parts such as lithium-ion batteries
2) Devices with non-uniform surfaces

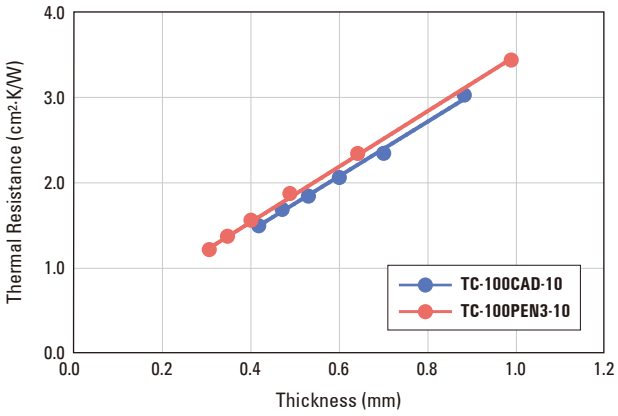
3 General properties

Parameter / Grade	Parameter		TC-100PEN3-10	TC-100PEN5-20
Color		—	Light purple	Blue
Size	mm	—	300 x 400	300 x 400
Structure		—	Single layer	Single layer
Thickness	mm	—	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0	0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0, 5.0
Density at 23°C	g/cm³	JIS K 6249	2.6	2.9
Hardness Asker C		—	10	20
Delectric Breakdown Voltage	kV/mm	JIS K 6249 in the air	15	12
Thermal Conductivity	W/m·K	ISO 22007-2	3.1	5.2
Flame-Retardance UL94		—	V-0 equivalent	V-0 equivalent

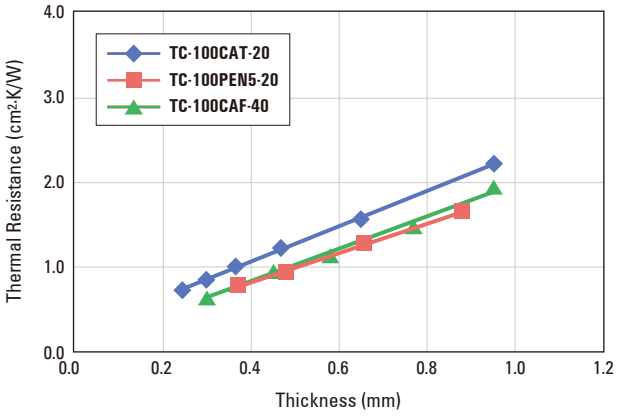
(Not specified values)

4 Thickness and Thermal resistance

Comparision between TC-PEN3-10 and conventional products

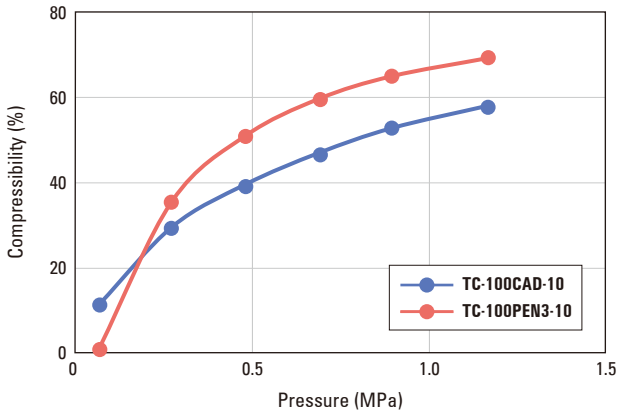


Comparision between TC-PEN5-20 and conventional products

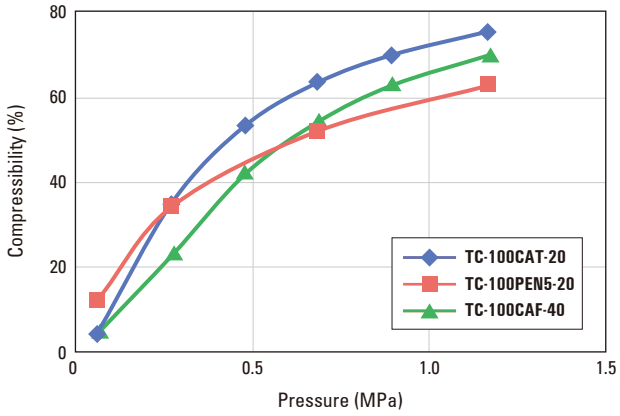


5 Pressure and compressibility

Comparision between TC-PEN3-10 and conventional products



Comparision between TC-PEN5-20 and conventional products



6 Handing precaution

1) Products should be stored in a dry place out of direct sunlight.
2) Avoid contact with residual solvents or oils as they may deteriorate the properties of the products.
3) For better results, the substrate surface should be cleaned and dried to remove any dirt, moisture or oils before application.
4) Prior to using the product with a thermal interface grease, test a sample with a small amount to determine compatibility.
5) Keep out of reach of children.
6) Be sure to read the Safety Data Sheets (SDS) for these products before use. SDS are available from the Shin-Etsu Silicone website. If the SDS is not listed on the website, please contact the sales department.

ShinEtsu

https://www.shinetsusilicone-global.com/

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