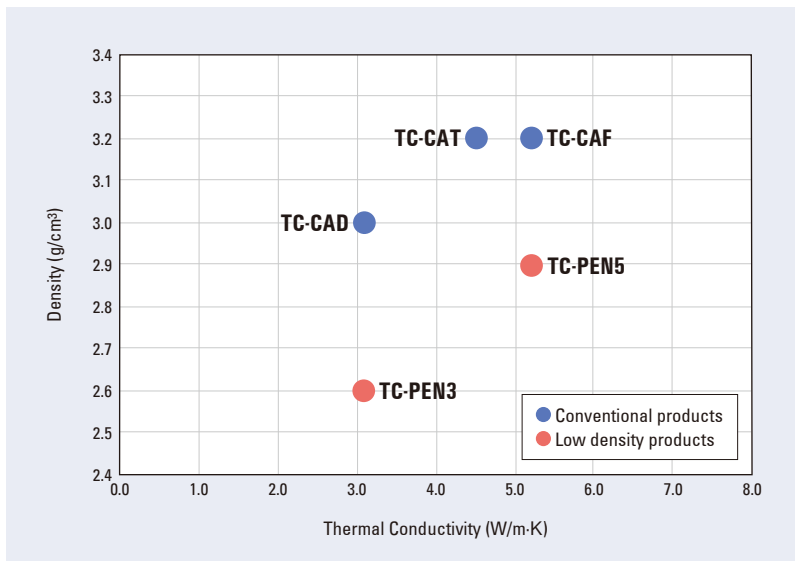
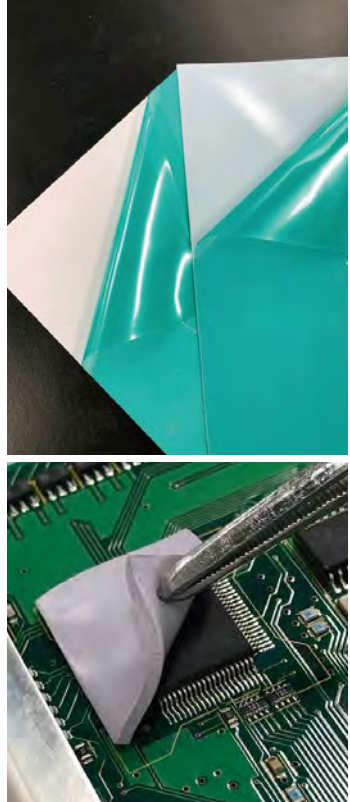


# Low Density and Soft Thermal Conductive Pad TC-PEN Series

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

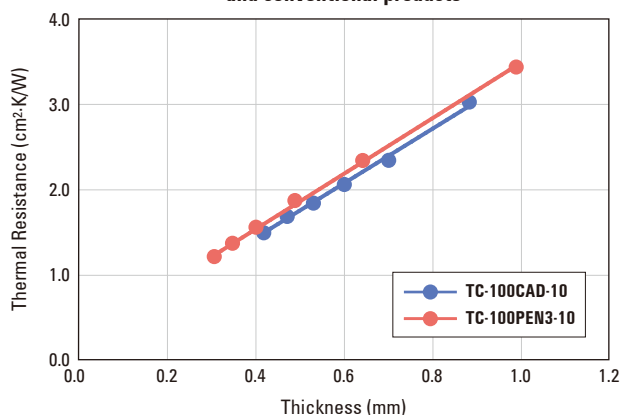
## 3 General properties

Parameter	Parameter	Grade	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/cm <sup>3</sup>	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

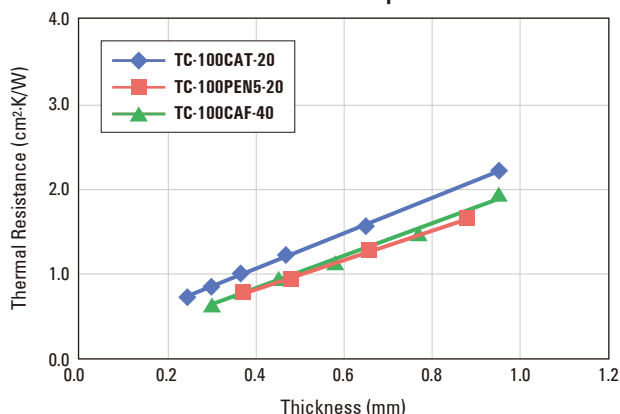
(Not specified values)

#### 4 Thickness and Thermal resistance

Comparison between TC-PEN3-10 and conventional products

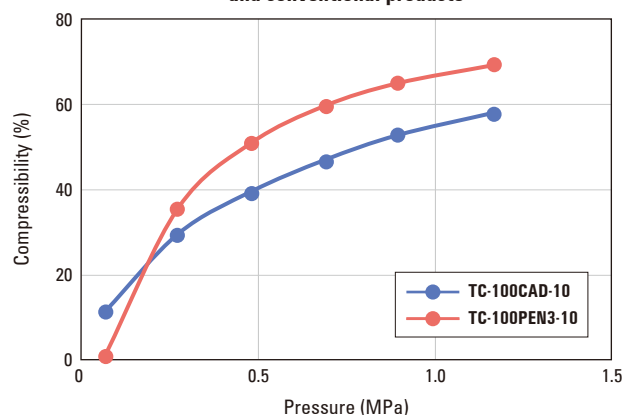


Comparison between TC-PEN5-20 and conventional products

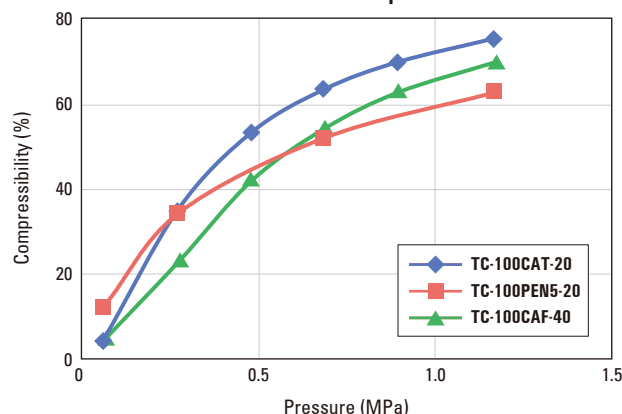


#### 5 Pressure and compressibility

Comparison between TC-PEN3-10 and conventional products



Comparison between TC-PEN5-20 and conventional products



#### 6 Handling 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) Please read the Safety Data Sheets (SDS) before use. SDS can be obtained from our Sales Department.

#### CAUTION

- The data and information presented in this catalog may not be relied upon to represent standard values. Shin-Etsu reserves the right to change such data and information, in whole or in part, in this catalog, including product performance standards and specifications without notice.
- Users are solely responsible for making preliminary tests to determine the suitability of products for their intended use. Statements concerning possible or suggested uses made herein may not be relied upon, or be construed, as a guaranty of no patent infringement.
- For detailed information regarding safety, please refer to the Safety Data Sheet (SDS).
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and obligation to determine the suitability of the silicone products described herein for any application, to make preliminary tests, and to confirm the safety of such products for their use.

- Users must never use the silicone products described herein for the purpose of implantation into the human body and/or injection into humans.
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