NYSTEIN TIM Isolator Flextein[®] TI104

Technical Data Sheet

Product Description:

Flextein TI104 is an thermal insulation material based on the nano-aerogel mechanism. The low thermal conductivity, lightweight and moderately flexibility make this material suitable for filling the gap and blocking the heat transfer between the heaters and the heat sinks. This soft interfacial material can be attached to the mating surface with minimal pressure, resulting in little or no stress on the mating parts. The thickness of the product can be customized per customers' requests and the tackiness is available for ease of use.

Features & Benefits:

- Thermal conductivity 0.03 W/m ·K
- Soft and conformable for curved surfaces
- Easy to be die-cut and processed
- Lightweight
- RoHS compliance



Typical Property Data:

Typical Property	TI104	Unit	Test Method
Color	Milk-white	-	Visual
Thickness	0.10 to 0.50	mm	ASTM D374
Thermal Conductivity	0.03	W/m · K	ISO 22007-2
Thermal Resistance	10 °C·in²/W 65°C·cm²/W	@ 0.5mm, 20 psi	ASTM D5470
Hardness	25	Shore C	ASTM D2240
Density	0.65	g/cm ³	ASTM D792
Dielectric Strength	≥ 5.0	KV/mm	ASTM D149
Volume Resistivity	≥ 1.0 × 10 ¹³	Ω·cm	ASTM D257
Tensile Strength	75	psi	ASTM D412
Elongation	60	%	ASTM D412
Operating Temp	-40 to 150	°C	Nystein
Flame Rating	V-0	-	UL 94
RoHS Compliance	Yes	-	Nystein

Typical Application:

- Smart wear
- Aerospace
- Medical electronics



- Household appliances (Regenerative electric stove, Refrigerator)
- Electronic communication equipment
- Industrial robot
- Military electronic equipment

Configuration Available:

- Standard size: 450×450 mm, sheet form and die-cut parts could be customerized
- Standard thickness: 0.1mm (0.004") to 0.5mm (0.02"), availabe for customerization
- Optional for natural tack on one or both sides

Storage conditions:

- Sealed and stored in dry place, away from light.
- Shelf life is 6 months at recommended storage temperature: 25°C (±3) and humidity: 50% (±10)
- The materials may be contaminated when unsealed, please do not mix the used material with the sealed products. Nystein does not assume any responsibility for contaminated products or conditions other than the required storage conditions.
- For additional information, please contact your appropriate sales, technical support, or customer service representative promptly.

Declare

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