



KYI-H1000 series (Thermal Gap Filler)

DATA SHEET



-Product picture-

Thermal gap filler has excellent flexibility insulation, compressibility and natural surface viscosity performances. It is used to fill the gap and realize the heat transfer between the heating parts and cooling parts. It also has insulation and shock mitigation effects. Meanwhile, it can satisfy the design requirements for minitype and ultra-thin equipments with excellent manufacturability and practicability. With wide range of thickness, it is widely used in electronic products.

FEATURES:

- Low thermal resistance
- Being recognized as UL94 V-0
- Viscous surface
- Being able to work under low pressure
- Excellent insulation performance and thermal resistance

APPLICATIONS:

- Between chip and heat-dissipation modules
- Optoelectronic Industry
- Netcom products
- New energy battery and vehicles industry
- Household appliances
- Wearable equipments

This series of products are environmentally compliant with RoHS 2.0, halogen, and REACH standards.

STORAGE CONDITIONS : Storage in the darkness

STORAGE TEMPERATURE : $\leq 30^{\circ}\text{C}$

STORAGE HUMIDITY : $\leq 70\%$

The height of the stacking should not be more than 7 layers and the total height should not be more than 1m.

SHELF LIFE :

Under storage conditions: 2 year

Non storage conditions: 6 months.

PROPERTIES

Items	Parameter	Unit	Test Method
Color	Gray	-	Visual
Thickness	0.5~3	mm	ASTM D 374
Hardness	50(±5)	Shore 00	ASTM D 2240
Density	3.6(±0.5)	g/cc	ASTM D 792
Compression Ratio	≥ 35 (@30Psi)	%	ASTM D 575
Rate of oil yield	≤ 1	%	--
UL Certification	V-0	-	UL94
Operating Temperature	-40~125	$^{\circ}\text{C}$	IEC 60068-2-14

THERMAL CHARACTERISTIC

Thermal conductivity	10.0(±0.5)	W/m·K	ASTM D 5470
Thermal resistance	≤ 0.38 (@10psi&2mm)	$^{\circ}\text{Cin}^2/\text{W}$	ASTM D 5470

ELECTRICAL PROPERTIES

Breakdown voltage	≥ 5	kV /mm	ASTM D 149
Volume resistivity	$\geq 10^8$	$\Omega\cdot\text{cm}$	ASTM D 257
Dielectric constant	≥ 2	@1MHz	ASTM D 150
Dielectric loss	≤ 0.1	@1MHz	ASTM D 150