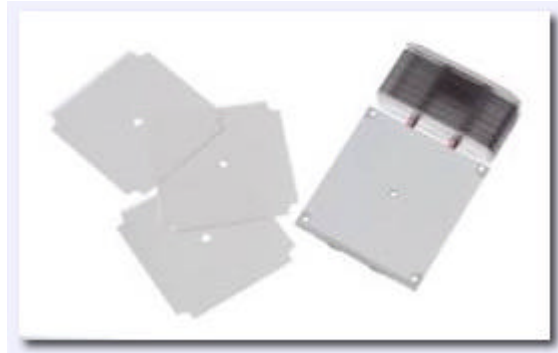


Orcus Datasheets

Free Standing Film 71°C

FSF- "Tacky2"



Advantages:

- ?? Thermal Resistance 0.03 C/W/in² (71°C)
- ?? Low Closure force 10psi
- ?? Naturally tacky on both sides for easy application to heat sink
- ?? Manufacturing Friendly
- ?? Thixotropic and won't flow from gaps
- ?? Available from 3 mils to 125 mils thick
- ?? Thermoplastic reversible adhesive bond

Description:

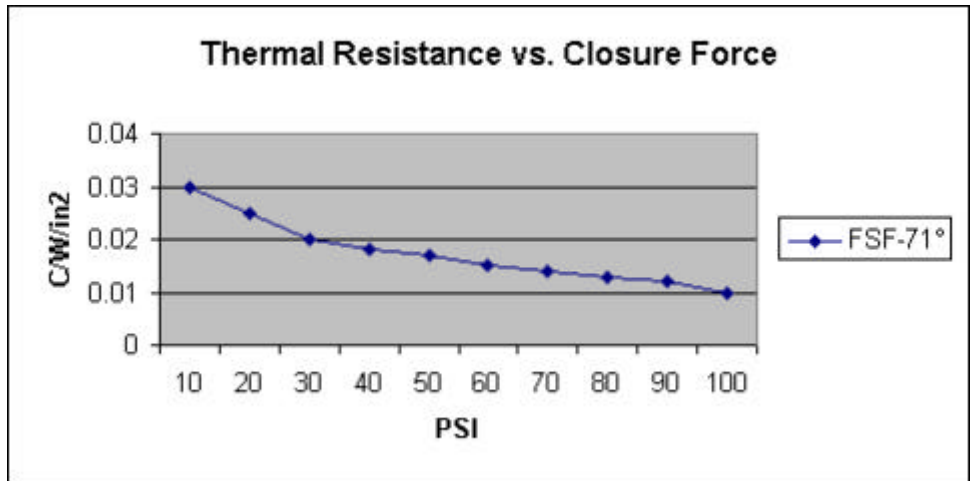
FSF (Free Standing Films) are self-supporting films of thermal interface material. They are thixotropic. The entire interface melts to create a very low thermal resistance path at very low closure force between component and heat sink.

Type FSF-71 "Tacky2" is naturally tacky on both sides. It can be easily applied to a heat sink by peeling off the easy to remove release liner from one side and pressing it against the heat sink. It will adhere to the heat sink by simple pressure. When the component is installed and heat and slight pressure are applied, the interface material changes phase and creates a very low thermal resistance path between component and heat sink. This material, in addition to being tacky at room temperature is also a thermoplastic adhesive. That is, after being melted, then resolidified between a heat sink and electrical component, the two will be adhered together. Reheating above the phase change temperature can easily break this thermoplastic bond.

FSF materials are not electrically conductive but contain nothing to prevent metal-to-metal contact between component and heat sink.

Typical Characteristics:

Thermal Characteristics	Units	FSF-71
Overall Thermal Resistance at 10psi. See graph of Thermal Resistance vs Closure Force (See test procedure)	°C/W/in ²	0.03 at 10 psi
Thermal Conductivity of Thermaphase Compound	W/m ² .K	0.63
Specific Heat of Thermaphase	Cp	1801.6
Phase Change Temperature	°C	71
Use Temperature	°C	-60 to +200
Mechanical Characteristics	Units	FSF-71
Substrate Material	----	None
Material thickness	mils	3 to 125
Viscosity (Thermaphase compound) at 150°C	Poise	>100
Density of Thermaphase Compound	g/cc	2.1
Electrical Characteristics	Units	FSF-71
Volume Resistivity	? -cm	10 ¹⁴



Thermal Resistance versus Closure Force

Typical Applications

The applications of "Tacky2" are the same as for Free Standing Film FSF-52. "Tacky2" is easier to apply to a heat sink by simply pressing the thermal interface pad onto the heat sink at room temperature. It does not require heat to temporarily adhere the pad to the heat sink. Use "Tacky2" in any application that requires a low thermal resistance path between electronic component and heat sink and the convenience of room temperature application of the interface to the heat sink surface.

Product Availability

Standard Sheets: 12"x12"
 Standard Rolls: 9"x500' and 13"x500'
 Standard die-cut parts: Pads for all standard case sizes are available. We have cut thousands of special die-cut parts.