



AOS Thermal Compounds

Sure-form Non-Silicone Gap filler

Product Code: 52041

TECHNICAL DATA SHEET



Product Description

AOS Non-Silicone 52041 Heat Sink Compound was developed by AOS in response to the need for power electronics cooling. The gap filler is available in easy-handling sheets. The material is sandwiched between two 0.002” PET Polyethylene terephthalate plastic) liners. The liners are readily removed and the material is easy to place on the surfaces to be cooled. Product code 52041 sheets are available thicknesses ranging from 0.05 – 0.5”. The thermal compound is also available as a high viscosity paste.

- This easy-to-handle, pre-formed, sheet product retains all the unique advantages of AOS Heat Sink Compound (product code 52052) but has over **2 times the thermal conductivity** of standard non-silicone heat sink compounds on the market. The material exhibits virtually no bleed or separation after hundreds of thermal cycles between 0 – 150 °C.
- While other products in this range become costly, **AOS Non-Silicone HSC**, remains comparable in cost to our standard AOS Heat Sink Compound.
- As with our entire line of Heat Sink Compounds, the AOS technical staff can modify **AOS Non-Silicone HSC** to meet your exacting specifications.

Typical Properties

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Consistency (Un worked)	90-110	ASTM D-217
Specific Gravity , @ 25°C	2.7	ASTM D-70
Bleed , @ 200°C, 24 Hrs., %/Wt	0.0	FTM-321 MODIFIED
Evaporation , @ 200°C, 24 Hrs., %/Wt.	0.50	FTM-321 MODIFIED
Thermal Conductivity , @ 36°C		ASTM D 5470-06 @ 36 °C
W/m.°K	2.2	@ 1,2 5, and 20 mils
Electrical Properties		
Dielectric Strength, 0.05” gap, V/mil	318	ASTM D-149
Dielectric Strength after exposure to 85°C/85% R.H. for 48 hours.	212	
Dielectric Constant, 25°C @ 1,000 Hz	5.0	ASTM D-150
Dissipation Factor, 25°C @ 1,000 Hz	0.0027	ASTM D-150
Volume Resistivity, ohm-cm	2.15 x 10 ¹⁵	ASTM D-257
Operating Temperature Range	-40°C to 200°C	
Appearance	Gray solid between PET sheets	

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