



# Thermal Interface Materials

With electronic circuits becoming smaller and more powerful, thermal management has become a critical design parameter to prevent overheating and circuit failure. Thermal Interface Materials (TIMs) work by displacing air gaps between heat-generated components and heat sinks to help conduit heat out of the system.

## Thermally Conductive Adhesives

Thermally conductive and electrically insulating epoxy systems efficiently dissipate heat while providing a durable and structural permanent bond.

**One-part** 9460TC

**Two-part** 8329TFF, 8329TFS, 8349TFM, 8329TCS, 8329TCM, 8329HTC

## Thermal Pastes

Thermal pastes create a non-permanent bond between heat-generating components and heat sinks.

**Silicone** 860

**Non-Silicone** 8616, 8617A, 8618

## Thermal Gap Fillers

Silicone-based materials cure to a putty-like consistency that perfectly conform to gaps at the interface between heat-generating components and cooling plates.

**High Thermal Conductivity** TIA225GF

**Extreme Thermal Conductivity** TIA241GF

## Thermal Potting Compounds

Thermally conductive epoxy potting compounds protect printed circuit boards and electronic devices while offering heat dissipation from the system.

**Non-Flame Retardant** 832TC

**Flame Retardant** 834B, 834HTC, 834FX

## Liquid Thermal Gels

One-part, silicone-free gels for energy intensive devices. These products have very high thermal conductivity,

**Flame Retardant** 8327GL3, 8327GL5, 8327GL6

## Applications

Thermal management

Heat dissipation

Bonding heat-sensitive components

Gap filling

## Industries

Battery modules and battery packs

Consumer electronics

LED manufacturing

Automotive

Aerospace

Defense

Instrumentation

Medical equipment

Research



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# Thermal Interface Materials

	TC [W/(m·K)]	Working Time [min]	Mix Ratio by Vol. [A:B]	Service Temp. [°C]	Mixed Viscosity [Pa·s]
<b>THERMALLY CONDUCTIVE ADHESIVES</b>					
9460TC	0.8	Unlimited	1-part	-65 to 150	Thixotropic paste
8329TFF	0.8	5	1:1	-40 to 150	Thixotropic paste
8349TFM	1.1	20	1:1	-50 to 150	260
8329TCM	1.4	45	1:1	-40 to 150	Thixotropic paste
8329TFS	1.2	240	1:1	-40 to 150	Thixotropic paste
8329TCS	1.4	240	1:1	-40 to 150	Thixotropic paste
8329HTC	2.7	90–120	1:1 by wt.	-55 to 160	80–120
<b>THERMAL PASTES</b>					
860	0.7	—	1-part	-40 to 200	490
8616	2.0	—	1-part	-70 to 165	365
8617A	3.0	—	1-part	-55 to 200	220
8618	6.0	—	1-part	-55 to 200	700
<b>THERMAL GAP FILLERS</b>					
TIA225GF	2.5	240	1:1	-45 to 200	100
TIA241GF	4.1	180	1:1	-45 to 200	130
<b>EPOXY POTTING COMPOUNDS</b>					
832TC	0.7	120	1:1	-30 to 175	27
834B	0.8	60	2:1	-40 to 175	16
834FX	0.6	150	1:1	-50 to 125	15
834HTC	0.9	90	5:1	-50 to 150	10
<b>THERMAL LIQUID GELS</b>					
8327GL3	3.5	—	1-part	-55 to 120	7 000
8327GL5	5.1	—	1-part	-55 to 150	3 500–5 000
8327GL6	6.0	—	1-part	-55 to 120	7 000

## Comparison Graph

