

## **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

# **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 heatgenerated 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 heatgenerating 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 protects 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



# **Thermal Interface Materials**

	TC [W/(m⋅K)]	Working Time [min]	Mix Ratio by Vol. [A:B]	Service Temp. [°C]	Mixed Viscosity [Pa·s]
THERMALLY CONDUCTIVE ADHESIVES					
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
THERMAL PASTES					
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
THERMAL GAP FILLERS					
TIA225GF	2.5	240	1:1	-45 to 200	100
TIA241GF	4.1	180	1:1	-45 to 200	130
EPOXY POTTING COMPOUNDS					
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
THERMAL LIQUID GELS					
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**



