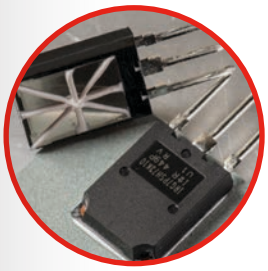
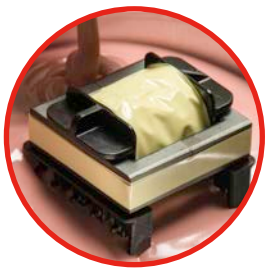
Improve the Thermal Stability of Your Power Electronics

In order to extend the life of your power electronics, you need to maintain low thermal resistance and protect them from shock, moisture and debris. Our low viscosity, highly thermally conductive pottants provide a robust thermal interface, as well as protect delicate electrical components. Additionally, we offer a variety of other thermal interface materials — available in gels, greases, adhesives and gap fillers — that will not only improve heat flow but also provide excellent isolation and vibration dampening. We can help you select the correct material for your application that aligns with your cost targets and optimize your process to improve performance.




ENCAPSULANTS

Our thermally conductive encapsulants provide electrical isolation and protection, and their low viscosity enables better impregnation and displacement of air.

Improve Performance: We have encapsulants that facilitate optimum heat transfer because of their high thermal conductivity and low viscosity.

Protect Electronics: Potting compounds can provide thermal shock resistance.

Reduce Component Stress: LORD encapsulants exhibit low shrinkage upon curing.

GELS AND GREASES

We understand that different applications require different solutions. We offer a broad portfolio of gels and greases to meet your unique specifications.

Resist Pump-Out: LORD gels enhance stable thermal performance by resisting pump-out.

Protect Against Shock: Our thermal interface materials provide excellent isolation and vibration dampening.

ADHESIVES

Formulated for standard MMD equipment, our adhesives provide your application with structural integrity. And, our thermally conductive adhesives not only provide mechanical rigidity but also a thermal connection where heat is a problem.

Improve Design Flexibility: No longer constrained by mechanical fixtures and given the ability to bond a wide variety of substrates, you are free to discover the possibilities.

Protect Electronics: LORD thermally conductive adhesives provide electrical insulation for high-voltage and low-voltage applications.

GAP FILLERS

Get the best performance out of your components by filling in all of those nooks and crannies with a thermally conductive gap filler. They are a stay-in-place solution and cure as a gel, easing the stresses caused by thermal differences and flex.

Low Outgas Options: We offer low ppm siloxane solutions for sensitive electronic applications.

Protect Against Shock: Our gap fillers remain tacky and soft to dampen vibration.

LORD
Ask Us How™

ENCAPSULANTS

PRODUCT	CHEMISTRY	THERMAL CONDUCTIVITY (W/mK)	VISCOSITY (cps @ 25°C)	DENSITY (g/cm³)
THERMOSET UR-388	Urethane	0.7	6000	1.47
THERMOSET SC-305	Silicone	0.7	4000	1.50
THERMOSET SC-309	Silicone	1.0	3600	1.66
THERMOSET SC-315	Silicone	1.5	3400	2.56
THERMOSET SC-252	Silicone	2.5	10,000	2.93
THERMOSET SC-320	Silicone	3.2	22,500	3.10
THERMOSET SC-324	Silicone	4.0	22,000	3.20

- Two-Component
- Room Temperature Curing
- Electrically Isolative
- 1:1 Mix Ratio

GELS AND GREASES

PRODUCT	CHEMISTRY	THERMAL CONDUCTIVITY (W/mK)	VISCOSITY (cps @ 25°C)
GELEASE MG-121	Silicone (gel)	2.3	75,000
GELEASE MG-133	Silicone (gel)	3.6	128,400
THERMOSET SG-21	Silicone (grease)	0.8	1,800,000
THERMOSET TC-501	Silicone (grease)	3.6	128,400

- One-Component
- Low Thermal Resistance Properties
- Reworkable

ADHESIVES

PRODUCT	CHEMISTRY	THERMAL CONDUCTIVITY (W/mK)	LAP SHEAR STRENGTH (MPa)
THERMOSET MT-125	Epoxy	2.3	20.7
THERMOSET MT-220	Epoxy-Silicone Hybrid	4.2	6.2
THERMOSET MT-328AD	Silicone	3.6	4.2
THERMOSET TC-2002	Acrylic	1.0	15.8

- One- and Two-Component
- Bond a Wide Variety of Substrates
- Room Temperature Curing
- Variable Cure Speeds

GAP FILLERS

THERMAL CONDUCTIVITY (W/mK)	SHORE HARDNESS (OO)	DENSITY (g/cm³)
1.0	30	1.7
2.0	30	2.0
3.0	30	3.3
3.5	50	3.3
4.0	70	3.4

- Two-Component
- Low Outgas Options
- Room Temperature Curing
- Electrically Isolative
- Standard MMD Equipment
- 1:1 Mix Ratio

For more information about our Thermal Management Materials...

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LORD Ask Us How™