Reduce the Temperature of Inductors/ Transformers by at Least 50°C

Inductors and transformers see a significant amount of electrical current during charging. These currents generate heat, thereby limiting charger output (kW) and decreasing the unit's life. Our thermally conductive solutions enable proper heat flow, which results in improved thermal performance. Since our encapsulants have a low viscosity, they flow easily into tiny crevices, enabling better impregnation of irregularly-shaped magnetic components and helping to reduce inductor hum. We offer a range of gap fillers that can provide a thermal interface between your charger's magnetics and the cooling plate. 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 encapsulants provide a robust thermal interface between magnetics, capacitors, switching electronics and the heat sink, resulting in a more reliable product for you and your customers. Additionally, LORD encapsulants can help quiet high frequency hum.

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.

GAP FILLERS

Get the best performance out of your electronic components by filling in all of those nooks and crannies with a thermally conductive gap filler. They are a stayin-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.



ENCAPSULANTS

PRODUCT	CHEMISTRY	THERMAL CONDUCTIVITY (W/mK)	VISCOSITY (cps @ 25°C)	DENSITY (g/cm³)
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

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

ABOUT LORD CORPORATION

LORD Corporation is a diversified technology and manufacturing company developing highly reliable adhesives, coatings, motion management devices, and sensing technologies that significantly reduce risk and improve product performance. For more than 90 years, LORD has worked in collaboration with our customers to provide innovative oil and gas, aerospace, defense, automotive and industrial solutions. With world headquarters in Cary, N.C., LORD has approximately 3,100 employees in 26 countries and operates 19 manufacturing facilities and 10 R&D centers worldwide. LORD actively promotes STEM education and many other community engagement initiatives. For more information, visit http://www.lord.com.

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