

Thermal Management Systems

Part Number (resin/hardener)	Thermal Solution	Chemistry	Thermal Conductivity (W/mK)	Ratio by Volume	Ratio by Weight	Mixed Viscosity,cPs (resin temp)	Working Time (min)	Gel Time (min)	Durometer (Shore)	Attributes
117-34P / 117-34i2	Thermal Gel Gap Filler	Polyurethane	1.5 W/mK	4 : 1	100 : 23	265,000 (resin 25°C)	30	90	65A	Lower cost silicone replacement where max temps are below 130C. Thixotropic, electrically insulating flexible. Passses UL94-V0
111-86P2 / 40016	Thermally conductive Adhesive	Polyurethane	1.0 W/mK	4 : 1	100 : 17	12,000 (resin 25°C)	10	17	90D	Bonds to wide variety of substrates, handling strength in 20 min, very durable.
20376 / 50275	High Performance Potting	Epoxy	1.6 W/mK	100 : 78	100 : 75	2800 (resin 60-70°C)	180 (at 70°C)	70 (at 100°C)	90D	High performance heat cure potting system for use up to 250C. High Tg (165°C), very low 23ppm CTE.
111-36P3 / 111-64i	Thermal Coating (sprayed)	Polyurea	0.3 W/mK (4-8 mils)	100 :45	100 : 23	N/A	1	3	65D	Extremely durable, very fast set for volume production, electrically insulating. Exellent replacement for PET film on batteries
111-36P2 / 111-36i	Thermal Coating (sprayed)	Polyurea	0.6 W/mK (4-8 mils)	100 : 15	100 :8.6	N/A	3	6	50D	Extremely durable, quick set for volume production, electrically insulating. Exellent replacement for PET film on batteries