SEMICONDUCTOR ENCAPSULANTS

PACKAGE LEVEL: DAM MATERIALS

PRODUCT	DESCRIPTION	RECOMMENDED CURE	FLOW SPEED	VISCOSITY, cPs	Tg, °C	CTE_{a1}, ppm/°C	% FILLER
FP4451™	Industry standard damming material for BGAs.	30 min @ 125°C + 90 min @ 165°C	NA	900,000	145	24	72
FP4451TD™	Tall dam version of FP4451™ for applications requiring a taller, narrower dam. Ionically cleaner also.	30 min @ 125°C + 90 min @ 165°C	NA	300,000	150	21	73
FP6401™	Zero stress dam for ceramic or large array packages.	30 min @ 125°C	NA	3,700	15	80	9

PACKAGE LEVEL: FILL MATERIALS

PRODUCT	DESCRIPTION	RECOMMENDED CURE	FLOW SPEED	VISCOSITY, cPs	Tg, °C	CTE_{a1}, ppm/°C	% FILLER
CB0260™	High adhesion version of FP4450™ for 260°C L3 JEDEC performance.	1 hr @ 110°C + 2 hrs @ 160°C	High	40,000	145	18	74
CB0260-1™	High adhesion version of FP4450™ for 260°C L2A JEDEC performance.	30 min @ 125°C + 90 min @ 165°C	High	40,000	149	18	74
CB064™/ FP4653™	Ultra low CTE, low stress version of FP4450™ for large array packages.	2 hrs @ 110°C + 2 hrs @ 160°C	Low	80,000	150	8	86
FP4450™	Industry standard fill material for dam and fill or cavity down BGAs.	30 min @ 125°C + 90 min @ 165°C	Medium	50,000	155	22	73
FP4450LV™	Low viscosity version of FP4450™ incorporating cleaner resins.	30 min @ 125°C + 90 min @ 165°C	High	35,000	155	22	72
FP4450HF™	High flow version of FP4450LV™ using synthetic filler for use in fine wire and low alpha application.	30 min @ 125°C + 90 min @ 165°C	Very High	32,000	160	19	73
FP4460™	Glob top version of FP4450™.	1 hr @ 125°C + 2 hrs @ 160°C	Low	300,000	170	20	75
FP4470™	High adhesion version of FP4450™ for 260°C L3 JEDEC performance.	30 min @ 125°C + 90 min @ 165°C	High	48,000	148	18	75

PACKAGE LEVEL: MAP LOW STRESS

PRODUCT	DESCRIPTION	RECOMMENDED CURE	FLOW SPEED	VISCOSITY, cPs	Tg, °C	CTE_{a1}, ppm/°C	% FILLER
CB064™/ FP4653™	Ultra low CTE, low stress version of FP4450™ for large array packages.	2 hrs @ 110°C + 2 hrs @ 160°C	Low	80,000	150	8	86
FP4651™	Low viscosity version of FP4650™ for large array packages.	1 hr @ 125°C + 90 min @ 165°C	Medium	130,000	150	11	82
FP4652™	Fast cure, low stress version of FP4450™ for large array packages.	15 min @ 110°C + 30 min @ 165°C	Medium	180,000	150	14	80

DISCRETES, ADHESIVE

PRODUCT	DESCRIPTION	RECOMMENDED CURE	FLOW SPEED	VISCOSITY, cPs	Tg, °C	CTE_{a1}, ppm/°C	% FILLER
FP0087™	Low stress fill for potting automated sensor and diodes; high Tg.	1 hr @ 125°C + 1 hr @ 180°C	High	20,000	175	18	76