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MICROELECTRONIC LIQUID ENCAPSULANTS

CAVITY FILL WITH DAM ■ FLIP CHIP UNDERFILL ■ GLOB TOP

Product	Shelf Life	Pot Life	Sp. Gravity	Viscosity @ 25°C (cps)	Cure Schedule	CTE (10 ⁻⁶ /°C)	Tg. (°C)	Operating Temp. Range	Thermal Conductivity (W/m ² K)	Volume Resistivity (Ohm-cm)
SEMICONDUCTOR ENCAPSULANT										
M-3022	12 months @ -40°C	>8 hrs @ 25°C	1.69	50,000	4 hrs @ 150°C	32	146	-55°C to 150°C	0.7	3x10 ¹⁴
M-3023	12 months @ -40°C	>8 hrs @ 25°C	1.76	39,000	30 min @ 100°C+ 2 hrs @ 165°C	25	151	-55°C to 150°C	0.75	1x10 ¹⁵
M-3024	12 months @ -40°C	>8 hrs @ 25°C	1.82	48,000	4 hrs @ 150°C	24	152	-55°C to 150°C	0.8	2x10 ¹⁴
M-3025	12 months @ -40°C	>8 hrs @ 25°C	1.75	24,000	1 hr @ 80°C+ 2 hrs @ 150°C	28	148	-55°C to 150°C	0.75	3x10 ¹⁵
M-3026	12 months @ -40°C	>8 hrs @ 25°C	1.82	85,000	30 min @ 100°C+ 2 hrs @ 165°C	22	156	-55°C to 150°C	0.8	1x10 ¹⁴
M-3028	12 months @ -40°C	>8 hrs @ 25°C	1.77	100,000	4 hrs @ 150°C	25	158	-55°C to 150°C	0.75	3x10 ¹⁴
FLIP CHIP ENCAPSULANT (Under 2 mils)										
M-3110	12 months @ -40°C	2 days @ 25°C	1.76	5100	1 hr @ 100°C+ 1 hrs @ 150°C	34	130	-40°C to 150°C	0.75	2x10 ¹⁵
M-3112	12 months @ -40°C	>8 hrs @ 25°C	1.82	32,000	1 hr @ 80°C+ 2 hrs @ 150°C	30	143	-55°C to 150°C	0.8	7x10 ¹⁴
M-3116	12 months @ -40°C	>8 hrs @ 25°C	1.73	14,000	2 hrs @ 150°C	29	150	-55°C to 150°C	0.75	1x10 ¹⁵
GLOB TOP ADHESIVES										
GT-3221	12 months @ -40°C	>8 hrs @ 25°C	1.72	280,000	1 hr @ 80°C+ 2 hrs @ 150°C	37	124	-55°C to 150°C	0.75	>10 ¹⁴
GT-3222	12 months @ -40°C	>8 hrs @ 25°C	1.67	90,000	1 hr @ 100°C+ 2 hrs @ 165°C	39	146	-55°C to 150°C	0.7	1x10 ¹⁵
GT-3224	12 months @ -40°C	>8 hrs @ 25°C	1.76	130,000	1 hr @ 100°C+ 2 hrs @ 165°C	32	156	-55°C to 150°C	0.75	4x10 ¹⁴

DISCLAIMER: All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.