Plaskon SMT-B-1LAR

Epoxy; Epoxide

Cookson Electronics - Semiconductor Products

Message:

This material is an epoxy molding compound optimized specifically for grid arrays (BGA/LGA) requiring low alpha particle count. It has the same unique resin system as the SMT-B-1, which minimizes warpage and enables trouble-free molding onto rigid and flexible laminate substrates. An all spherical filler system ensures outstanding moldability especially with automated and conventional molding systems. Minimal dimensional change after molding, post bake and subsequent solder treatment make this compound an excellent choice for grid array applications.

General Information			
Features	Semi-conductive		
	Good dimensional stability		
	Low warpage		
	Low viscosity		
	High temperature strength		
Forms	Liquid		
Processing Method	Resin transfer molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.88	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.050	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Flexural Modulus			ASTM D790
21°C	1.37	MPa	ASTM D790
215°C	0.588	MPa	ASTM D790
Flexural Strength			ASTM D790
21°C	0.0108	MPa	ASTM D790
215°C	0.00441	MPa	ASTM D790
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	222	°C	ASTM E1356
CLTE - Flow	1.6E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.70	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
Dielectric Strength	16	kV/mm	ASTM D149
Dielectric Constant (1 kHz)	3.70		ASTM D150
Dissipation Factor (1 kHz)	2.1E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (3.18 mm)	V-0		UL 94
Oxygen Index	34	%	ASTM D2863
Additional Information			

Recommended Storage Temperature: <5°CLife @ 5°C, defined as not more than 40% loss of spiral flow based on original values.: 24 monthsLife @ 21°C, defined as not more than 40% loss of spiral flow based on original values.: 5 daysLife @ 35°C, defined as not more than 40% loss of spiral flow based on original values.: 2 daysSpiral Flow, 175°C, 1000 psi: 100 cmAutomatic Orifice Viscosity, 175°C, Shear Rate is 100000 sec-1, 1 mm die length, 1/2 mm diameter: 50 poiseRam Follower Gel Time, 175°C, 1000 psi: 9 secAsh Content: 77 %Hydrolyzable Halides: <1 ppmAlpha Particle Count: <0.001 counts/cm^2/hrCull Hot Hardness, Shore D, 90 sec, 175°C: 75Volume Resistivity, 22°C: 1e15 ohm-cmAll test specimens are transfer molded and post cured for 4 hours at 175°C
Linear Thermal Expansion, Alpha 1: 16 cm^-6/cm/°C
Linear Thermal Expansion, Alpha 2: 56 cm^-6/cm/°C

Injection instructions

Resin Transfer Molding:
Preheat Temperature: 90 to 100°C
Molding Temperature: 170 to 185°C
Molding Pressure: 750 to 1000 psi
Cure Time, 177°C: 1 to 1.5min
Post Mold Cure Time, 175°C: 0 to 4 hr

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China