Plaskon 7090

Epoxy; Epoxide

Cookson Electronics - Semiconductor Products

Message:

This material is a high thermal conductivity epoxy molding compound for the encapsulation of a variety of semiconductor devices ranging from small lead count DIPs to medium lead count PLCCs and power devices. It was especially developed for balanced end use properties.

General Information			
Features	Semi-conductive Laser marking Good formability Excellent appearance		
Forms	Liquid		
Processing Method	Resin transfer molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	2.09	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.70	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Flexural Modulus	1.38	MPa	ASTM D790
Flexural Strength	0.0124	MPa	ASTM D790
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	160	°C	ASTM E1356
CLTE - Flow	3.0E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	32	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	7.8E+15	ohms·cm	ASTM D257
Dielectric Strength	12	kV/mm	ASTM D149
Dielectric Constant (1 kHz)	5.00		ASTM D150
Dissipation Factor (1 kHz)	0.010		ASTM D150
Arc Resistance	180	sec	ASTM D495
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (3.18 mm)	V-0		UL 94
Oxygen Index	28	%	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, 177°C, 1000 psi: 82 to 93 cmAutomatic Orifice Viscosity, 175°C, Shear Rate is 157000 sec-1, 1 mm die length, 1/2 mm diameter: 130 Pascal secRam Follower Gel Time, 177°C: 10 to 18 secAsh Content: 72.7 %Hydrolyzable Halides: 100 ppmCull Hot Hardness, Shore D, 90 sec, 175°C: 75Arc Resistance, 110v AC180 secAll test specimens are transfer molded and post cured for 4 hours at 175°C Linear Thermal Expansion, Alpha 1: 30 cm^-6/cm/°C Linear Thermal Expansion, Alpha 2: 80 cm^-6/cm/°C

Injection instructions

Resin Transfer Molding:
Preheat Temperature: 102 to 106°C
Molding Temperature: 175 to 179°C
Molding Pressure: 750 to 1000 psi
Cure Time, 177°C: 1 to 2min
Post Mold Cure Time, 175°C: 2 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