Plaskon NXG-1HS

Epoxy; Epoxide

Cookson Electronics - Semiconductor Products

Message:

This material is an epoxy molding compound for high temperature, lead-free reflow in heat spreader applications. It is designed to withstand more demanding requirements in moisture performance, occasioned by the higher IR reflow temperatures required for processing lead-free packages. It is a highly filled, hybrid resin developed to pass JEDEC Level 2A at 260°C IR reflow temperature. It is a "green" compound with no halogens and a lower Tg than multifunctional materials.

General Information			
Features	Semi-conductive		
	Low (to no) lead content		
	Low hygroscopicity		
	Fast curing		
	Good formability		
	Heat resistance, high		
	Halogen-free		
Forms	Liquid		
Processing Method	Resin transfer molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	2.00	g/cm³	ASTM D792
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Flexural Modulus			ASTM D790
22°C	2.45	MPa	ASTM D790
260°C	0.118	MPa	ASTM D790
Flexural Strength			ASTM D790
22°C	0.0123	MPa	ASTM D790
260°C	9.81E-4	MPa	ASTM D790
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	160	°C	ASTM E1356
CLTE - Flow	8.5E-6	cm/cm/°C	ASTM D696
Thermal Conductivity	0.70	W/m/K	ASTM C177
Flammability	**Nominal Value**		**Test Method**
Flame Rating (3.18 mm)	V-0		UL 94

Additional Information
Recommended Storage Temperature: <5°CLife @ 5°C, defined as not more than 40% loss of spiral flow based on original values.: 6 monthsLife @ 22°C, defined as not more than 40% loss of spiral flow based on original values.: 2 daysLife @ 35°C, defined as not more than 40% loss of spiral flow based on original values.: 0.5 daysSpiral Flow, 175°C, 1000 psi: 132 cmShimadzu Viscosity, 175°C, 1000 psi: 55 poiseRam Follower Gel Time, 175°C, 1000 psi: 18 secAsh Content: 88.6 %Hydrolyzable Halides: <1 ppmMoisture Absorption, 85°C/85%RH, 168 hrs: 0.28%Cull Hot Hardness, Shore D: 80All test specimens are transfer molded and post cured for 4 hours at 175°C Linear Thermal Expansion, Alpha 1: 8.5 cm^-6/cm/°C Linear Thermal Expansion, Alpha 2: 33 cm^-6/cm/°C

Injection instructions

Resin Transfer Molding:
Molding Temperature: 165 to 185°C
Molding Pressure: 1000 psi
In Mold Cure Time: 50 to 100 sec
Post Mold Cure Time, 175°C: 0 to 2 hr

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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