Plaskon MUF-2A LAR

Epoxy; Epoxide

Cookson Electronics - Semiconductor Products

Message:

This material is an epoxy molding compound for high temperature, lead-free reflow in low alpha 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 warpage Workability, good		
Forms	Liquid		
Processing Method	Resin transfer molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.89	g/cm³	ASTM D792
Molding Shrinkage - Flow	0.050	%	ASTM D955
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Flexural Modulus			ASTM D790
22°C	1.77	MPa	ASTM D790
215°C	0.588	MPa	ASTM D790
Flexural Strength			ASTM D790
22°C	0.00834	MPa	ASTM D790
215°C	0.00343	MPa	ASTM D790
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	195	°C	ASTM E1356
CLTE - Flow	1.6E-5	cm/cm/°C	ASTM D696
Thermal Conductivity	0.75	W/m/K	ASTM C177
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	4.5E+15	ohms·cm	ASTM D257
Dielectric Strength	31	kV/mm	ASTM D149
Dielectric Constant (1 kHz)	3.13		ASTM D150
Dissipation Factor (1 kHz)	1.7E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**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.: 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: 150 cmShimadzu Viscosity, 175°C, 1000 psi: 40 poiseRam Follower Gel Time, 175°C, 1000 psi: 16 secAsh Content: 80 %Hydrolyzable Halides: <1 ppmAlpha Particle Count: <0.0015 counts/cm^2/hrCull Hot Hardness, Shore D: 85All 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: 55 cm^-6/cm/°C

Injection instructions

Resin Transfer Molding:
Molding Temperature: 165 to 170°C
Molding Pressure: 500 to 900 psi
In Mold Cure Time: 100 to 200 sec
Perform Temperature: 80 to 85°C
Transfer Time: 6 to 15sec