GL-30B CF(NM)(NH) Halogen free Non-flow Prepreg

Introduction

GL-30B CF(NM) non-flow prepreg is the one with best storage stability in the present market. It also has high Tg (>175°C by DMA), high Td (decomposition temperature is 375°C), low CTE, dust free for punching and high thermal reliability. It fits all the needs for rigid flex board application.

The best storage stability in present market

According to our test, under room temperature environment, after one week storage, the flow in only decrease less than 30% while dominate material from our competitors decrease more the 50%. This advantage not only eases the concern of material properties aging, but also offers a more predictable material for customer's manufacturing.

High Decomposition Temperature

With higher Td, GL-30B CF(NM) non-flow prepreg has better reliability performance against heat.

Advanced High Tg Resin Technology

GL-30B CF(NM) have high Tg (>175°C by DMA). With the same epoxy type, we also offer GL-30B CF(NH) with higher Tg (>190°C by DMA). These two parts both have excellent thermal reliability and dust-free with punching processing for rigid flex board application.

Low CTE

Only 1.8% expansion at Z axis from 50 to 260°C, greatly reduce the stress and unbalance during assembly process.

Lead-Free Assembly Compatible

RoHS compliant and support lead free assemblies with a maximum reflow temperature of 260°C.

Prepreg Availability

The glass styles of 1078, 1067, 1037 Prepreg are available that contain 6-24mil circular flow for different customer's designs and applications.

GL-30B CF(NM) Non-Flow Prepreg (High Tg Multifunctional Filled Epoxy Resin)

Properties

Laminate Thickness		Test Method	Test	11.5	GL 200 GE(ALL)
Laminate Property		IPC-TM-650	Equipment	Unit	GL-30B CF(NM)
Glass Transition Temp.		2.4.25	TMA/Q400	°C	171
Glass Transition Temp.		2.4.25	DMA/Q800	°C	184
Decomposition Temp.		2.3.40	TGA	°C	375
Peel Strength H oz(B/O)		2.4.8	Tensile strength	kgf/cm	1.1
Peel Strength (PI)		2.4.8	Tensile strength	kgf/cm	0.9~1.1
Thermal Stress 288°C 10s		2.4.13.1	Soldering Pot	cycle	>20
Solder Dip 280°C		2.4.13.1	Soldering Pot	min	>20
T-260		2.4.24.1	TMA/Q400	min	>120
T-288		2.4.24.1	TMA/Q400	min	>120
Z-CTE	α1	2.4.24	TMA/Q400	ppm /°C	11.7
	α2			ppm/°C	204.1
	50 to 260°C			%	1.8

Prepreg Specifications

G/F	R/C(%)	Flow in(mil)	V/C(%)	THK (um) (Residual copper 100%)
1037	70±3	<25	≦1.5	45±10
1067	67±3	<25	≦1.5	50±10
1067	72±3	<25	≦1.5	60±10
1078	67±3	<25	≦1.5	80±10