SI13U

Low CTE Material for PKG Substrate

FEATURES

- Tg≥230℃ (DMA), Td>400℃ (5% loss, TGA)
- High Flexural Modulus/Low X, Y / Z-axis CTE
- Good punching & Drilling ability
- Halogen-free compatible with lead-free processing. RoHS/WEEE compliant.

APPLICATIONS

Memory Card, SSD, DRAM
Fingerprint, RF Module, AP
BOC, COB, WBBGA

GENERAL PROPERTIES

Property	Test Condition	Metric Units	SI13U
Dielectric Constant*	@1GHz	-	4.8
Dissipation Factor*	@1GHz	-	0.013
Tg	DMA	℃	245
	TMA		210
Td	Wt 5% loss	℃	>400
Solder Dipping	@288℃	min	>30
CTE(40-260℃)	x/y-axis(α1)	ppm/℃	13
	z-axis(α1/α2)*	ppm/℃	30/140
Peel Strength to Copper*	1/3 OZ, LP Cu	N/mm	0.9
Young's modulus	50℃	GPa	22
	260℃	GPa	13
Flexural modulus*	50℃	GPa	28
	260℃	GPa	15
Water Absorption*	A	%	0.14
	85℃/85%Rh,168Hr	%	0.35
Flammability	UL 94	-	V-0
Thermal Conductivity	-	W/(m·K)	0.58
Color	-	-	black

Remarks:
Specimen thickness: 0.10mm, besides the items with * is for 0.8mm specimen thickness. Test method is according to IPC-TM-650.
All the typical value listed above is for your reference only, please turn to Shengyi Technology Co., Ltd. for detailed information, and all rights from this data sheet are reserved by Shengyi Technology Co., Ltd.

PURCHASING INFORMATION

Laminate SI13U

Type	Order Thickness (mm)	Nominal Thickness (mm)	Ply-up
Standard	0.05	0.053	1X1078
	0.06	0.060	1X1078
	0.10	0.106	2X1078
	0.15	0.159	3X1078
	0.20	0.210	2X2116
M	0.05	0.052	2X1027
	0.06	0.060	2X1037
	0.20	0.210	4X1078

*Normal size are 40"X48", other sheet size and thickness could be available upon request.

Prepreg SI13NB

Type	Glass Cloth IPC No.	Nominal Thickness (mm) (inner Cu 100%)	RC (%)
SI13NB	1027	0.03	67
	1027	0.04	74
	1037	0.04	71
	1037	0.05	76
	1067	0.05	69
	1067	0.06	74
	1078	0.06	61
	1078	0.07	66