



SDI06K

Low CTE & Low Loss & Low Dk Halogen Free Material for HDI PCB

FEATURES

- Lead-free compatible.
- High Tg Halogen-free, Tg 220°C (TMA).
- Low Dk & Low Loss.
- Lower X/Y/Z-axis CTE.

APPLICATIONS

Smart phone, NB, Tablet, Instrumentation, VCR, TV, Electronic Game Machine, Communication Equipment, Automotive electronics, etc..

GENERAL PROPERTIES

Test Items		Test Condition	Test Method	Unit	Typical Value
Tg		TMA	IPC TM-650 2.4.24	°C	220
		DMA	IPC TM-650 2.4.24.2		260
Flammability		C-48/23/50, E-24/125	UL94	Rating	V-0
		E-24/125+des			
Volume Resistivity		After moisture resistance	IPC TM-650 2.5.17.1	MΩ/cm	4.76 × 10 ⁸
		E-24/125			5.00 × 10 ⁶
Surface Resistivity		After moisture resistance	IPC TM-650 2.5.17.1	MΩ	1.84 × 10 ⁷
		E-24/125			5.00 × 10 ⁶
Arc Resistance		D-48/50+D-0.5/23	IPC TM-650 2.5.1	s	181
Dielectric Breakdown		D-48/50+D-0.5/23	IPC TM-650 2.5.6	kV	45+kV NB
Dielectric Constant	C-24/23/50, RC=50%/70%	1GHz	IPC TM-650 2.5.5.9	-	4.0/3.5
		10GHz	IPC TM-650 2.5.5.5		3.92/3.53
Dissipation Factor	C-24/23/50, RC=50%/70%	1GHz	IPC TM-650 2.5.5.9	-	0.0040/0.0050
		10GHz	IPC TM-650 2.5.5.5		0.0070/0.0075
Thermal Stress	Unetched	288°C, solder dip	IPC TM-650 2.4.13.1	-	Pass
	Etched				
Peel Strength		A, HOz RTF	IPC TM-650 2.4.8	N/mm	0.95
		125°C, HOz RTF			0.90
Flexural Modulus	LW	A	IPC TM-650 2.4.4	GPa	24
	CW				23
Water Absorption		D-24/23	IPC TM-650 2.6.2.1	%	0.15
CTE Z-axis	Before Tg	TMA	IPC TM-650 2.4.24	ppm/°C	25-30
	50-260°C	TMA	IPC TM-650 2.4.24	%	1.4
CTE ^(*) X/Y-axis	Before Tg	TMA	IPC TM-650 2.4.24	ppm/°C	9-10
Td		TGA (5% W.L)	IPC TM-650 2.4.24.6	°C	420
T288		TMA	IPC TM-650 2.4.24.1	min	>60

Remarks: 1. All the typical value is based on the 1.0mm specimen. (*) is based on 0.10mm(1x2116) specimen.

2. 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.



SDI06KB PREPREG

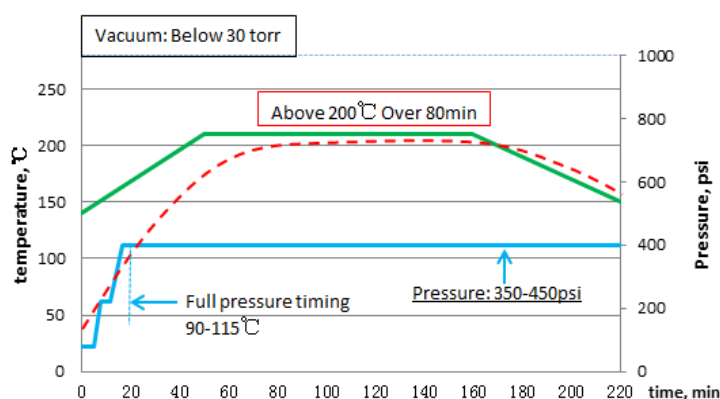
Low CTE & Low Loss & Low Dk Halogen Free Material for HDI PCB

PREPREG PARAMETERS

Glass fabric type	Resin content (%)	Cured thickness (um)	Glass fabric type	Resin content (%)	Cured thickness (um)
1010	79	27	1078	65	74
	81	30		67	79
1017	77	30	1080	66	79
	79	33		68	84
1027	73	41	1086	65	83
	75	45		67	90
1037	73	48	3313	57	100
	75	53		59	107
1067	71	60	2116	56	125
	73	65		58	135

Other prepreg type, resin content could be available upon request.

HOT PRESSING CYCLE



- Heat up rate: 1.5-3.0°C/min (80-140°C).
- Curing time: >80min (>200°C).
- Full pressure timing: product temperature 90-115°C.
- The hot pressing parameter is for your reference only, please turn to Shengyi Technology Co., Ltd for detailed information.

STORAGE CONDITION

- 3 months when stored at < 23°C and <50% RH.
- 6 months when stored at <5°C. Normalize in room temperature for at least 4h before using.
- Beware of moisture, always keep wrapped in damp-proof material. Were kept in normal condition, prepreg might absorb moisture and its bonding strength would be weakened.