Autolad6G

Low CTE & Low Loss & Low Dk Halogen free Automotive use Materials

FEATURES

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

APPLICATIONS

ADAS parts, Camera module,
Domain controller, Computing units,
High voltage embedded chip etc..

GENERAL PROPERTIES

Test Items		Test Condition		Test Method	Unit	Typical Value
Tg		TMA		IPC TM-650 2.4.24	℃	220
		DMA		IPC TM-650 2.4.24.2		260
Td		TGA (5% W.L)		IPC TM-650 2.4.24.6	℃	400
T288		TMA		IPC TM-650 2.4.24.1	min	＞60
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℃, solder dip		IPC TM-650 2.4.13.1	-	Pass
	Etched					
Peel Strength		A, H Oz RTF		IPC TM-650 2.4.8	N/mm	0.85
		125℃, H Oz RTF				0.80
Flexural Modulus	LW	A		IPC TM-650 2.4.4	GPa	28
	CW					27
Water Absorption		D-24/23		IPC TM-650 2.6.2.1	%	0.15
CTE Z-axis	Before Tg	TMA		IPC TM-650 2.4.24c	ppm/℃	25-30
	After Tg	TMA		IPC TM-650 2.4.24c	ppm/℃	90-120
	50-260℃	TMA		IPC TM-650 2.4.24c	%	1.2
CTE (*) X/Y-axis	Before Tg	TMA		IPC TM-650 2.4.24.5	ppm/℃	9-10
Flammability		C-48/23/50, E-24/125		UL94	Rating	V-0
		E-24/125+des				
Thermal conductivity(**)		ASTM-D5470		A	W/ (m•K)	0.59

Remarks: 1. All the typical value is based on the 1.0mm specimen. (*) X/Y CTE is based on 0.10mm(1x2116) specimen, (**) Thermal conductivity is based on 0.12mm(2x1078) 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.

Autolad6GB PREPREG

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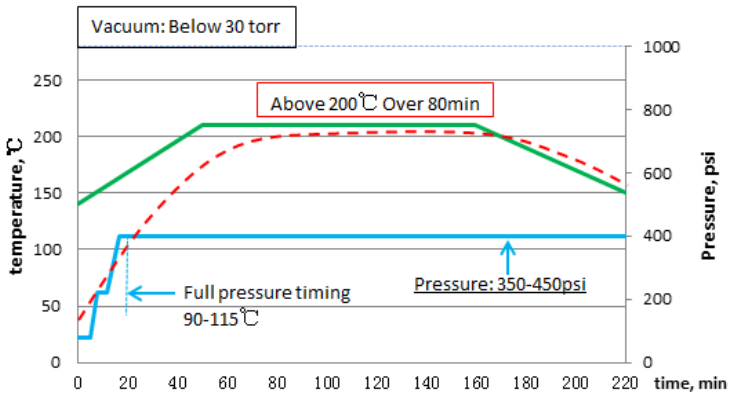
HOT PRESSING CYCLE



- Heat up rate: 1.5-3.0℃/min (80-140℃).
- Curing time: >80min (>200℃).
- Full pressure timing: product temperature 90-115℃.
- 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℃ and <50% RH.
- 6 months when stored at <5℃. 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.