



# SML02G

(UL ANSI: FR-15.1) High Tg Halogen Free Material

## FEATURES

- Lead-free compatible.
- High Tg Halogen-free, Tg 195°C(DMA).
- UV Blocking/AOI compatible.
- Lower Z-axis CTE.

## APPLICATIONS

- Communication equipment, mobile phone;
- High performance computing;
- Electronic game machine and etc.

## GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.24.2	DMA	°C	195
Td	IPC-TM-650 2.4.24.6	5% Wt. Loss	°C	420
T288	IPC-TM-650 2.4.24.1	TMA	min	60
T260	IPC-TM-650 2.4.24.1	TMA	min	60
Thermal Stress	PC-TM-650 2.4.13.1	288°C, solder dipping	-	PASS
CTE Z-axis	IPC-TM-650 2.4.24	Before Tg	ppm/°C	40
	IPC-TM-650 2.4.24	After Tg	ppm/°C	210
	IPC-TM-650 2.4.24	50-260°C	%	2.3
Dielectric Constant	IPC-TM-650 2.5.5.9	C-24/23/50, 1GHz	-	4.8
Dissipation Factor	IPC-TM-650 2.5.5.9	C-24/23/50, 1GHz	-	0.013
Volume Resistivity	IPC-TM-650 2.5.17.1	After moisture resistance	MΩ-cm	1.98×10 <sup>7</sup>
	IPC-TM-650 2.5.17.1	E-24/125		6.30×10 <sup>7</sup>
Surface Resistivity	IPC-TM-650 2.5.17.1	After moisture resistance	MΩ	3.53×10 <sup>6</sup>
	IPC-TM-650 2.5.17.1	E-24/125		2.40×10 <sup>6</sup>
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	180
Dielectric Breakdown	IPC-TM-650 2.5.6	D-48/50+D-0.5/23	kV	>45
Peel Strength 1OZ	IPC-TM-650 2.4.8	288°C/10s	N/mm	1.4
	IPC-TM-650 2.4.8	125°C		1.2
Flexural Strength(LW/CW)	IPC-TM-650 2.4.4	A	MPa	600/480
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.08
Flammability	UL94	C-48/23/50, E-24/125	Rating	V-0
		E-24/125+des		
CTI	IEC 60112	A	Rating	PLC3

Remarks: 1. Specification sheet: IPC-4101/130, is for your reference only.

2. All the typical value is based on the 1.6mm (8×7628) specimen.

3. 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.



# SML02GB PREPREG

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## PREPREG PARAMETERS

Glass fabric type	Resin content (%)	Cured thickness (mm)	Standard size(Roll type)
106	72	0.050	1.260m×150m
	76	0.060	
1080	64	0.075	1.260m×300m
	68	0.086	
2313	56	0.100	
	59	0.109	
2116	50	0.110	1.260m×250m
	53	0.118	
	56	0.127	
1506	44	0.150	1.260m×150m
7628	44	0.193	
	46	0.203	
	48	0.213	
	50	0.223	

Other type, resin content and size could be available upon request.

## HOT PRESSING CYCLE

- Heat up rate: 1.5-3.0°C/min (80-140°C) as usual, 2.5-4.0°C/min (80-140°C) for heavy copper structure.
- Curing time: >60min (190-200°C)
- The hot pressing parameter is for your reference only, please turn to Shengyi Technology Co., Ltd for detailed information.

## STORAGE CONDITION

- Three months when stored at < 23°C and <50% RH.
- Six 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.

## PURCHASING INFORMATION

Thickness	Copper foil	Standard size
0.05mm to 3.2mm	12um to 210 um	1,020mm×1,220mm(40"×48") 915mm×1,220mm(36"×48")
		1,070mm×1,220mm(42"×48")

Remarks: Other sheet size and thickness could be available upon request.