S1000-2

(UL ANSI: FR-4.0) High Tg, Low CTE

FEATURES

- Anti-CAF capability
- Lead-free compatible
- Excellent thermal reliability
- Excellent through-hole reliability

APPLICATIONS

Router
Computer
Communication equipment
Precise apparatus and instrument

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.24.4	DMA	℃	185
	IPC-TM-650 2.4.25D	DSC	℃	180
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	℃	345
T260	IPC-TM-650 2.4.24.1	TMA	min	>60
T288	IPC-TM-650 2.4.24.1	TMA	min	20
T300	IPC-TM-650 2.4.24.1	TMA	min	5
Thermal Stress	IPC-TM-650 2.4.13.1	288℃, solder dip	s	>100
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/℃	45
	IPC-TM-650 2.4.24	After Tg	ppm/℃	220
	IPC-TM-650 2.4.24	50-260℃	%	2.8
Permittivity (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	4.4
Loss Tangent (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.015
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	2.2×10^{8}
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	7.9×10^{7}
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	100
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℃/10s	N/mm [lb/in]	1.4 [8.00]
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	Mpa	562/518
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.10
Flammability	UL94	C-48/23/50	Rating	V-0
CTI	IEC60112	A	Rating	PLC 3

Remarks: 1. Specification sheet: IPC-4101/126, 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.

S1000-2B PREPREG

(UL ANSI: FR-4.0) Bonding Prepreg For S1000-2

PREPREG PARAMETERS

Glass fabric type	Resin content(%)	Cured thickness(mm)	Standard size(Roll type)
106/1037	70	0.046	1.260m×150m
	73	0.052	
	76	0.060	
	78	0.065	
1080/1078	62	0.070	1.260m×300m
	65	0.077	
	68	0.086	
2313	54	0.094	
	57	0.102	
2116	53	0.117	1.260m×250m
	56	0.127	
	58	0.134	
1506	44	0.150	1.260m×150m
	49	0.170	
7628	43	0.187	
	45	0.196	
	48	0.210	
	50	0.222	

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

HOT PRESSING CYCLE

- The heat-up rate depends on the inner copper or the structure of multilayer PCB.
- Curing time: >60min (185~195℃).
- If you need any more detail information, please turn to Shengyi Technology Co., Ltd.

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. Keeping in normal condition, prepreg might absorb moisture and its bonding strength would be weakened.
- Avoid UV-rays and strong light.

PURCHASING INFORMATION

Thickness	Copper foil	Standard size
0.05mm to 3.2mm	12um to 105 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.