



S1000

(UL ANSI: FR-4.0) Mid-Tg, Low CTE, Lead-free

FEATURES

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

APPLICATIONS

Computer
 Game machine
 Instruments, VCR
 Automotive electronics
 Communication equipment

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.25D	DSC	°C	155
Td	IPC-TM-650 2.4.24.6	TGA (5% W.L)	°C	335
T288	IPC-TM-650 2.4.24.1	TMA	min	10
T260	IPC-TM-650 2.4.24.1	TMA	min	>60
Thermal Stress	IPC-TM-650 2.4.13.1	288°C, solder dip	s	>100
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/°C	49
	IPC-TM-650 2.4.24	After Tg	ppm/°C	250
	IPC-TM-650 2.4.24	50-260°C	%	3.4
Permittivity (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	4.7
Loss Tangent (1GHz)	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.009
Volume Resistivity	IPC-TM-650 2.5.17.1	After moisture resistance	MΩ-cm	2.5×10 ⁸
Surface Resistivity	IPC-TM-650 2.5.17.1	After moisture resistance	MΩ	4.0×10 ⁷
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	147
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 [lb/in]	1.3 [7.43]
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	Mpa	540/450
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.09
Flammability	UL94	C-48/23/50	Rating	V-0
CTI	IEC60112	A	Rating	PLC 3

- Remarks:
1. Specification sheet: IPC-4101/99, 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.



S1000B PREPREG

(UL ANSI: FR-4.0) Bonding Prepreg for S1000

PREPREG PARAMETERS

Glass fabric type	Resin content (%)	Cured thickness (mm)	Standard size (Roll type)
106	73	0.053	1.260m×150m
	78	0.066	
1080/1078	63	0.073	1.260m×300m
	65	0.077	
	68	0.086	
2313/3313	55	0.097	1.260m×250m
	58	0.106	
2116	55	0.124	1.260m×250m
	58	0.135	
1506	45	0.153	1.260m×150m
	48	0.165	
7628	43	0.186	1.260m×150m
	45	0.195	
	47	0.205	
	50	0.220	

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: >45min (180~190℃).
- 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.