

S1000

(ULANSI:FR-4)Low Z-CTE

特点

- 无铅兼容FR-4板材。
- Tg(DSC)155℃,UV Blocking 和 AOI兼容。
- 优良的耐热性。
- 比普通FR-4降低约30~35%的Z轴热膨胀系数。
- 优良的通孔可靠性。
- 优异的耐CAF性和Q1000性能。
- 低吸水率。

FEATURES

- Lead-free compatible FR-4 Laminate.
- Tg(DSC)155℃,UV Blocking/ AOI compatible.
- Excellent thermal reliability.
- Z-CTE 30~35% less than conventional FR-4.
- Excellent T/H reliability.
- Excellent anti-CAF and Q1000 performance.
- Low water absorption.

应用领域

电脑、仪器仪表、摄像机、通讯设备、汽车、电子游戏机等。

APPLICATIONS

Computer, Instrumentation, VCR, communication equipment, automotive electronics, electronic game machine, and etc.

GENERAL PROPERTIES

Test Item		Treatment Condition	Unit	Property Data	
				SPEC	Typical Value
Tg		DSC	$^{\circ}\mathbb{C}$	≥150	155
Flammability		C-48/23/50 E-24/125	Rating	V-0	V-0
Volume Resistivity		After moisture resistance	MΩ-cm	≥10 ⁶	7.4×10 ⁸
		E-24/125		≥10 ³	5.6×10 ⁶
Surface Resistivity		After moisture resistance E-24/125	$M\Omega$	≥10 ⁴ >10 ³	7.6×10 ⁷ 2.8×10 ⁶
Arc Resistance		D-48/50+D-0.5/23	S	≥60	147
Dielectric Breakdown		D-48/50+D-0.5/23	KV	≥ 40	45
Dielectric Constant (1MHz)		C-24/23/50	-	≤ 5.4	4.9
Dissipation Factor (1MHz)		C-24/23/50	-	≤ 0.035	0.011
Thermal Stress	Unetched Etched	288℃,solder dip	-	>10s No delamination	100s No delamination
Peel	1oz	288℃,10s	N/mm	≥1.05	1.4
Strength	Cu. Foil	125℃	IN/IIIIII	≥ 0.70	1.2
Flexural Strength	LW	А	MPa	≥ 415	540
	CW			≥ 345	450
Water Absorption		D-24/23	%	≤ 0.5	0.09
CTE	Before Tg	TMA	PPM/℃	≪60	49
	After Tg	TMA	PPM/℃	≤300	250
Z-axis	50~260℃	TMA	%	≤3.5	3.4
Td		10℃/min,N₂	°C	≥325	335
T288		TMA	min	≥5	10
T260		TMA	min	≥30	60
CTI		IEC60112	V	PLC 3(175V249V)	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 specimen, while the Tg is for specimen \geqslant 0.50mm.
- 3.All the typical value listed above is for your reference only, please turn to Shengyi Sci.Tech.Co., Ltd. for detailed information, and all rights from this data sheet are reserved by Shengyi Sci.Tech.Co., Ltd.

Explanations: C = Humidity conditioning; D = Immersion conditioning in distilled water; E = Temperature conditioning.

The figures following the letter symbols indicate with the first digit the duration of the preconditioning in hours, with the second digit the preconditioning temperature in °C and with the third digit the relative humidity.