



S7040G

Halogen free, High reliability & Mid Loss Material

FEATURES

- High Tg and high Td
- Halogen free material
- Excellent thermal reliability
- Excellent anti-CAF performance
- Low Dk/Df (@10GHz): 3.72/0.0089
- Lower Z-axis CTE, offering superior PTH reliability

APPLICATIONS

Server, Switch, Base station
 Backplane, Line cards
 High performance computing
 Office Routers

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value	
Tg	IPC-TM-650 2.4.24.4	DMA	°C	185	
	IPC-TM-650 2.4.25D	DSC		175	
Td	IPC-TM-650 2.4.24.6	TGA(5% W.L)	°C	405	
T288	IPC-TM-650 2.4.24.1	TMA	min	60	
T300	IPC-TM-650 2.4.24.1	TMA	min	60	
Thermal Stress	IPC-TM-650 2.4.13.1	288°C, solder dip	-	Pass	
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/°C	45	
	IPC-TM-650 2.4.24	After Tg	ppm/°C	245	
	IPC-TM-650 2.4.24	50-260°C	%	2.5	
Permittivity	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	3.90
	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	-	3.72
	10GHz	IEC61189-2-721	C-24/23/50	-	4.06
Loss Tangent	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.0070
	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	-	0.0089
	10GHz	IEC61189-2-721	C-24/23/50	-	0.0100
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	7.0×10 ⁷	
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	9.0×10 ⁷	
Dielectric Breakdown	IPC-TM-650 2.5.6	D-48/50+D-0.5/23	kV	>45	
Peel Strength (10z)	IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	0.85 [4.86]	
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.12	
Flammability	UL94	C-48/23/50	Rating	V-0	

Remarks : 1. All the typical value is based on the 0.76mm (6*2116) specimen, but not guarantee data.

2. All the typical value listed e 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.