



# S7439G

(UL ANSI: FR15.1) Halogen Free, Low Loss & High Reliability Material

## FEATURES

- High Tg and high Td
- Halogen free material
- Excellent thermal reliability
- Excellent anti-CAF performance
- Low Dk/Df (@10GHz): 3.74/0.0060
- 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	189	
	IPC-TM-650 2.4.25D	DSC		181	
Td	IPC-TM-650 2.4.24.6	Wt 5% loss	°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	s	100	
CTE(Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/°C	45	
	IPC-TM-650 2.4.24	After Tg	ppm/°C	225	
	IPC-TM-650 2.4.24	50-260°C	%	2.5	
Permittivity	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	3.93
	10GH <sub>Z</sub>	IPC-TM-650 2.5.5.5	C-24/23/50	-	3.74
	10GH <sub>Z</sub>	IEC61189-2-721	C-24/23/50	-	4.08
Loss Tangent	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.0045
	10GH <sub>Z</sub>	IPC-TM-650 2.5.5.5	C-24/23/50	-	0.0060
	10GH <sub>Z</sub>	IEC61189-2-721	C-24/23/50	-	0.0070
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	9.0×10 <sup>8</sup>	
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	2.0×10 <sup>7</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(1 Oz)	IPC-TM-650 2.4.8	288°C/10s	N/mm[lb/in]	1.2[7.0]	
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) thickness specimen, but not guarantee data.

2. 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.