



# S7439C

## Low Loss & Heat Resistance Multilayer PCB Material

### FEATURES

- High Tg and high Td
- Excellent thermal reliability
- Excellent anti-CAF performance
- Low Dk/Df (@10GHz): 3.66/0.0060
- 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	200
		IPC-TM-650 2.4.25D	DSC		190
Td		IPC-TM-650 2.4.24.6	TGA (5% W.L)	°C	383
T288		IPC-TM-650 2.4.24.1	TMA	min	120
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	210
		IPC-TM-650 2.4.24	50-260°C	%	2.6
Permittivity	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	3.85
	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	-	3.66
	10GHz	IEC61189-2-721	C-24/23/50		4.05
Loss Tangent	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50		0.0045
	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	-	0.0060
	10GHz	IEC61189-2-721	C-24/23/50	-	0.0068
Volume Resistivity		IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	4.03×10 <sup>7</sup>
Surface Resistivity		IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	2.03×10 <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 (1Oz)		IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	0.95 [5.43]
Water Absorption		IPC-TM-650 2.6.2.1	D-24/23	%	0.09
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.