



# S7439

## 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 and Base station  
Backplane, Line cards  
High performance computing, Office Routers etc.

### 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) 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.