



S7439G

Low Loss, Halogen-free Multilayer PCB Material

FEATURES

- High Tg: 181 °C (DSC)
- Low Dk/Df (10GHz): 3.74/0.0060
- Lower Z-axis CTE

APPLICATIONS

Server, Switch, Base station
Line cards graphic card, etc.

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	5% wt. loss	°C	405
T288	IPC-TM-650 2.4.24.1	TMA	min	≥60
T260	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	225
	IPC-TM-650 2.4.24	50-260 °C	%	2.5
Dielectric Constant	IPC-TM-650 2.5.5.9	C-24/23/50, 1GHz	-	3.93
	IPC-TM-650 2.5.5.5	C-24/23/50, 10GHz	-	3.74
	IEC 61189-2-721	C-24/23/50, 10GHz		4.08
Dissipation Factor	IPC-TM-650 2.5.5.9	C-24/23/50, 1GHz		0.0043
	IPC-TM-650 2.5.5.5	C-24/23/50, 10GHz	-	0.0060
	IEC 61189-2-721	C-24/23/50, 10GHz	-	0.0070
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	9.0×10 ⁷
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	2.0×10 ⁷
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	0.90
Water Absorption	IPC-TM-650 2.6.2.1	E-1/105+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 values listed above are for your reference only and not intended for specification. Please contact Shengyi

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Explanation: C=Humidity conditioning, D=Immersion conditioning in distilled water, E=Temperature conditioning

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