



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, 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	5% wt. loss	°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
Dielectric Constant	IPC-TM-650 2.5.5.9	C-24/23/50, 1GHz	-	3.85
	IPC-TM-650 2.5.5.5	C-24/23/50, 10GHz	-	3.66
	IEC61189-2-721	C-24/23/50, 10GHz		4.05
Dissipation Factor	IPC-TM-650 2.5.5.9	C-24/23/50, 1GHz		0.0045
	IPC-TM-650 2.5.5.5	C-24/23/50, 10GHz	-	0.0060
	IEC61189-2-721	C-24/23/50, 10GHz	-	0.0068
Volume Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	4.03×10 ⁷
Surface Resistivity	IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	2.03×10 ⁷
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 (10z)	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.

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

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