S7439GS

(FR15.1) Halogen-free, Low-loss & High Reliability Material

FEATURES

- Good dimensional stability and flatness
- High heat resistance: T300 >60min
- Lower X/Y-axis CTE(≤13ppm)
- MOT 150

APPLICATIONS

High Speed Network equipment,
Server, Switch, Storage and Routers,
High Performance Computing,
Optical Module, etc.

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.24.4	DMA	℃	205
	IPC-TM-650 2.4.25	DSC		190
Td	IPC-TM-650 2.4.24.6	5% wt. loss	℃	390
T300	IPC-TM-650 2.4.24.1	TMA	min	≥60
Storage Modulus	IPC-TM-650 2.4.24.4	DMA	GPa	24
Thermal Stress	IPC-TM-650 2.4.13.1	288℃, solder dip	-	Pass
CTE (X-axis)	IPC-TM-650 2.4.41	50-125℃	ppm/℃	12.0
CTE (Y-axis)	IPC-TM-650 2.4.41	50-125℃	ppm/℃	11.5
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg	ppm/℃	26
	IPC-TM-650 2.4.24	After Tg	ppm/℃	130
	IPC-TM-650 2.4.24	50-260℃	%	1.40
Dielectric Constant	IPC-TM-650 2.5.5.9 (1GHz)	C-24/23/50	-	3.98
	IPC-TM-650 2.5.5.5 (10GHz)	C-24/23/50	-	3.77
Dissipation Factor	IPC-TM-650 2.5.5.9 (1GHz)	C-24/23/50	-	0.0040
	IPC-TM-650 2.5.5.5 (10GHz)	C-24/23/50	-	0.0058
Volume Resistivity	IPC-TM-650 2.5.17.1	After moisture resistance	MΩ-cm	4.0×10^{7}
Surface Resistivity	IPC-TM-650 2.5.17.1	After moisture resistance	MΩ	2.0×10^{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+kV NB
Peel Strength (1Oz RTF)	IPC-TM-650 2.4.8	288℃/10s	N/mm	0.80
Water Absorption	IPC-TM-650 2.6.2.1	E-1/105+D-24/23	%	0.10
Flammability	IPC-TM-650 UL94	C-48/23/50, E-24/125	Rating	V-0

Remarks:

1. All typical value is based on the 0.76mm (6*2116) specimen, but not guarantee data.
2. All typical values listed above are for your reference only and not intended for specification. Please contact Shengyi Technology Co., Ltd. for detailed information. All rights from this data sheet are reserved by Shengyi Technology Co., Ltd.

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 ℃ and the third digit the relative humidity.