



S1150GH

(UL ANSI: FR4.1) Halogen-free, Mid-Loss PCB Used Multilayer Material

FEATURES

- Anti-CAF capability
- Lead-free compatible
- Halogen, antimony and red phosphorous free
- lower loss than normal Mid-Tg FR-4.1

APPLICATIONS

Smartphone, Tablet, NB
LED, Game Station
Network Terminals
Memory, module, SSD

GENERAL PROPERTIES

Test Items		Test Method	Test Condition	Unit	Typical Value
Tg		IPC-TM-650 2.4.25D	DSC	°C	160
Td		IPC-TM-650 2.4.24.6	TGA (5% wt. loss)	°C	390
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 dipping	s	>100
CTE (Z-axis)		IPC-TM-650 2.4.24	Before Tg	ppm/°C	35
		IPC-TM-650 2.4.24	After Tg	ppm/°C	190
		IPC-TM-650 2.4.24	50-260°C	%	2.2
Dk (RC: 56%)	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	4.05
	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	-	3.96
Df (RC: 56%)	1GHz	IPC-TM-650 2.5.5.9	C-24/23/50	-	0.007
	10GHz	IPC-TM-650 2.5.5.5	C-24/23/50	-	0.008
Volume Resistivity		IPC-TM-650 2.5.17.1	C-96/35/90	MΩ-cm	6.0×10 ⁸
Surface Resistivity		IPC-TM-650 2.5.17.1	C-96/35/90	MΩ	8.0×10 ⁷
Arc Resistance		IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	148
Dielectric Breakdown		IPC-TM-650 2.5.6	D-48/50+D-0.5/23	kV	45+kV NB
Peel Strength (1oz)		IPC-TM-650 2.4.8	288°C/10s	N/mm [lb/in]	1.4 [8.0]
Flexural Strength (LW/CW)		IPC-TM-650 2.4.4	A	Mpa	550/430
Water Absorption		IPC-TM-650 2.6.2.1	D-24/23	%	0.10
Flammability		UL94	C-48/23/50	Rating	V-0

Remark:

1. All the typical value is based on the 1.6mm (8*7628) specimen. Dk and Df value is based on 2116 RC56%.
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.