



Autolad4G

(UL ANSI: FR-4.1) High Tg, Halogen Free & Low Dk Automotive-use Materials

FEATURES

- Lead-free compatible.
- High Tg Halogen-free, Tg 190°C (DMA)
- UV Blocking/AOI compatible.
- Excellent HDI reliability performance, capable of mSAP process.

APPLICATIONS

ADAS parts, Camera module, Automotive Data Center, Computing units, etc.

GENERAL PROPERTIES

Test Items	Test Method	Test Condition	Unit	Typical Value
Tg	IPC-TM-650 2.4.24	TMA	°C	170
	IPC-TM-650 2.4.24.2	DMA	°C	190
Td	IPC-TM-650 2.4.24.6	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 (Unetched/Etched)	IPC-TM-650 2.4.13.1	288°C, solder dipping	-	Pass/Pass
CTE (X, Y-axis)	IPC-TM-650 2.4.24.5	Before Tg	ppm/°C	12/13
CTE (Z-axis)	IPC-TM-650 2.4.24	Before Tg /After Tg	ppm/°C	30/190
	IPC-TM-650 2.4.24	50-260°C	%	2.1
Dielectric Constant	IPC-TM-650 2.5.5.9	C-24/23/50, 1027RC75%,1GHz	--	3.38
Dissipation Factor	IPC-TM-650 2.5.5.9	C-24/23/50, 1027RC75%,1GHz	--	0.0072
Volume Resistivity	IPC-TM-650 2.5.17.1	After moisture resistance	MΩ/cm	3.87×10 ⁹
	IPC-TM-650 2.5.17.1	E-24/125	MΩ/cm	5.66×10 ⁸
Surface Resistivity	IPC-TM-650 2.5.17.1	After moisture resistance	MΩ	1.72×10 ⁷
	IPC-TM-650 2.5.17.1	E-24/125	MΩ	5.19×10 ⁶
Arc Resistance	IPC-TM-650 2.5.1	D-48/50+D-0.5/23	s	182
Dielectric Breakdown	IPC-TM-650 2.5.6	D-48/50+D-0.5/23	kV	> 45
Peel Strength	IPC-TM-650 2.4.8	288°C/10s, H oz Copper Foil	N/mm	0.95
	IPC-TM-650 2.4.8	125°C, H oz Copper Foil	N/mm	0.90
Flexural Strength (LW/CW)	IPC-TM-650 2.4.4	A	MPa	510/490
Water Absorption	IPC-TM-650 2.6.2.1	D-24/23	%	0.06
Flammability	UL94	C-48/23/50, E-24/125	Rating	V-0

Remarks: 1. Specification sheet: IPC-4101/130, is for your reference only.

2. All the typical value listed above is for your reference only, please contact Shengyi Technology Co., Ltd for detailed information, and all rights from this data sheet are reserved by Shengyi Technology Co., Ltd.