



## IS550H - Typical Values

Property		Typical Value	Units	Test Method
			Metric (English)	IPC-TM-650 (or as noted)
Glass Transition Temperature (Tg) by DSC		200	°C	2.4.25C
Glass Transition Temperature (Tg) by DMA		220	°C	2.4.24.4
Decomposition Temperature (Td) by TGA @ 5% weight loss		400	°C	2.4.24.6
Time to Delaminate by TMA (Copper removed)	A. T260 B. T288	>60	Minutes	2.4.24.1
Z-Axis CTE	A. Pre-Tg	38	ppm/°C	2.4.24C
	B. Post-Tg	210	ppm/°C	
	C. 50 to 260°C, (Total Expansion)	2.2	%	
X/Y-Axis CTE	Pre-Tg	13-17	ppm/°C	2.4.24C
Thermal Conductivity		0.7	W/mK	ASTM E1952
Thermal Stress 10 sec @ 288°C (550.4°F)	A. Unetched B. Etched	Pass	Pass Visual	2.4.13.1
Dk, Permittivity	A. @ 2 GHz	4.50	—	2.5.5.5
	B. @ 5 GHz	4.43		
	C. @ 10 GHz	4.43		
Df, Loss Tangent	A. @ 2 GHz	0.014	—	2.5.5.5
	B. @ 5 GHz	0.014		
	C. @ 10 GHz	0.016		
Volume Resistivity	A. C-96/35/90	$5.2 \times 10^7$	MΩ-cm	2.5.17.1
	B. At elevated temperature	$3.2 \times 10^8$		
Surface Resistivity	A. C-96/35/90	$1.0 \times 10^8$	MΩ	2.5.17.1
	B. At elevated temperature	$3.9 \times 10^8$		
Dielectric Breakdown		60	kV	2.5.6B
Arc Resistance		TBD	Seconds	2.5.1B
Electric Strength (Laminate & laminated prepreg)		46.9(1190)	kV/mm (V/mil)	2.5.6.2A
Comparative Tracking Index (CTI)		3	Class (Volts)	UL 746A ASTM D3638
Peel Strength	A. Standard profile copper	1.45 (8.2) 1.35(7.6)	N/mm (lb/inch)	2.4.8.2A 2.4.8.3
	1. After thermal stress 2. At 125°C (257°F)			
Flexural Strength	A. Length direction	60.9	ksi	2.4.4B
	B. Cross direction	50.8		
Tensile Strength	A. Length direction	TBD	ksi	ASTM D3039
	B. Cross direction			
Moisture Absorption		0.25	%	2.6.2.1A
Flammability (Laminate & laminated prepreg)		V-0	Rating	UL 94
Relative Thermal Index (RTI)		150	°C	UL 796
The data, while believed to be accurate and based on analytical methods considered to be reliable, is for information purposes only. Any sales of these products will be governed by the terms and conditions of the agreement under which they are sold.				