



## I-Tera<sup>®</sup> MT40 - 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 TMA		205	°C	2.4.24C
Decomposition Temperature (Td) by TGA @ 5% weight loss		360	°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	55	ppm/°C	2.4.24C
	B. Post-Tg	290	ppm/°C	
	C. 50 to 260°C, (Total Expansion)	2.8	%	
X/Y-Axis CTE	Pre-Tg	12	ppm/°C	2.4.24C
Thermal Conductivity		0.61	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 B. @ 5 GHz C. @ 10 GHz	3.45	—	2.5.5.5
	A. @ 2 GHz B. @ 5 GHz C. @ 10 GHz	0.0031	—	Bereskin Stripline
Volume Resistivity	C-96/35/90	1.33 x 10 <sup>7</sup>	M?-cm	
Surface Resistivity	C-96/35/90	1.33 x 10 <sup>5</sup>	M?	2.5.17.1
Dielectric Breakdown		45.4	kV	2.5.6B
Arc Resistance		139	Seconds	2.5.1B
Electric Strength (Laminate & laminated prepreg)		45 (1133)	kV/mm (V/mil)	2.5.6.2A
Comparative Tracking Index (CTI)		3	Class (Volts)	UL 746A ASTM D3638
Peel Strength	1 oz. EDC foil	1.0 (5.7)	N/mm (lb/inch)	2.4.8C
Flexural Strength	A. Length direction B. Cross direction	71.0 58.0	ksi	2.4.4B
	A. Length direction B. Cross direction	39.0 35.0	ksi	ASTM D3039
Young's Modulus	A. Length direction B. Cross direction	3060 2784	ksi	ASTM D790-15e2

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Property		Typical Value	Units Metric (English)	Test Method IPC-TM-650 (or as noted)
Poisson's Ratio	A. Length direction	0.234	—	ASTM D3039
	B. Cross direction	0.222		
Moisture Absorption		0.1	%	2.6.2.1A
Flammability (Laminate & laminated prepreg)		V-0	Rating	UL 94
Relative Thermal Index (RTI)		130	°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.