

RF-35TC Typical Values					
Property	Test Method	Unit	Value	Unit	Value
Dk @ 10 GHz	IPC-650 2.5.5.5.1 (Modified)		3.50		3.50
T _c K (-30 to 120 °C)	IPC-650 2.5.5.5.1 (Modified)	ppm	24	ppm	24
Df @ 10 GHz	IPC-650 2.5.5.5.1 (Modified)		0.0011		0.0011
Dielectric Breakdown	IPC-650 2.5.6 (In-Plane,Two Pins in Oil)	kV	56.7	kV	56.7
Dielectric Strength	ASTM D 149 (Through Plane)	V/mil	570	V/mm	22,441
Arc Resistance	IPC-650 2.5.1	Seconds	304	Seconds	304
Moisture Absorption	IPC-650 2.6.2.1	%	0.05	%	0.05
Flexural Strength (MD)	ASTM D 790 / IPC-650 2.4.4	psi	12,900	N/mm ²	88.94
Flexural Strength (CD)	ASTM D 790 / IPC-650 2.4.4	psi	11,700	N/mm ²	80.67
Tensile Strength (MD)	ASTM D 3039 / IPC-TM-650 2.4.19	psi	9,020	N/mm ²	62.19
Tensile Strength (CD)	ASTM D 3039 / IPC-TM-650 2.4.19	psi	7,740	N/mm ²	53.37
Elongation at Break (MD)	ASTM D 3039 / IPC-TM-650 2.4.19	%	1.89	%	1.89
Elongation at Break (CD)	ASTM D 3039 / IPC-TM-650 2.4.19	%	1.70	%	1.70
Young's Modulus (MD)	ASTM D 3039 / IPC-TM-650 2.4.19	psi	667,000	N/mm ²	4,599
Young's Modulus (CD)	ASTM D 3039 / IPC-TM-650 2.4.19	psi	637,000	N/mm ²	4,392
Poisson's Ratio (MD)	ASTM D 3039 / IPC-TM-650 2.4.19		0.18		0.18
Poisson's Ratio (CD)	ASTM D 3039 / IPC-TM-650 2.4.19		0.18		0.18
Compressive Modulus	ASTM D 695 (23 °C)	psi	560,000	N/mm ²	3,861
Flexural Modulus (MD)	ASTM D 790 / IPC-650 2.4.4	psi	1.46 x10 ⁶	N/mm ²	10,309
Flexural Modulus (CD)	ASTM D 790 / IPC-650 2.4.4	psi	1.50 x 10 ⁶	N/mm ²	10,076
Peel Strength (½ oz CVH)	IPC-650 2.4.8 (Thermal Stress)	lbs./inch	7	N/mm	1.25
Thermal Conductivity (Unclad, 125 °C)	ASTM F433 (Guarded Heat Flow)	W/(mK)	0.60	W/(mK)	0.60
Thermal Conductivity (C1/C1, 125 °C)	ASTM F433 (Guarded Heat Flow)	W/(mK)	0.92	W/(mK)	0.92
Thermal Conductivity (CH/CH, 125 °C)	ASTM F433 (Guarded Heat Flow)	W/(mK)	0.87	W/(mK)	0.87
Dimensional Stability (MD)	IPC-650-2.4.39 Sec. 5.4 (After Etch)	mils/in.	0.23	mm/M	0.23
Dimensional Stability (CD)	IPC-650-2.4.39 Sec. 5.4 (After Etch)	mils/in.	0.64	mm/M	0.64
Dimensional Stability (MD)	IPC-650-2.4.39 Sec. 5.5 (Thermal Stress)	mils/in.	-0.04	mm/M	-0.04
Dimensional Stability (CD)	IPC-650-2.4.39 Sec. 5.5 (Thermal Stress)	mils/in.	0.46	mm/M	0.46
Surface Resistivity	IPC-650 2.5.17.1 (After elevated temp.)	Mohms	8.33 x 10 ⁷	Mohms	8.33 x 10 ⁷
Surface Resistivity	IPC-650 2.5.17.1 (After humidity)	Mohms	6.42 x 10 ⁷	Mohms	6.42 x 10 ⁷
Volume Resistivity	IPC-650 2.5.17.1 (After elevated temp.)	Mohms/cm	5.19 x 10 ⁸	Mohms/cm	5.19 x 10 ⁸
Volume Resistivity	IPC-650 2.5.17.1 (After humidity)	Mohms/cm	2.91 x 10 ⁸	Mohms/cm	2.91 x 10 ⁸
CTE (X axis) (23 to 125 °C)	IPC-650 2.4.41 / ASTM D 3386	ppm/°C	11	ppm/°C	11
CTE (Y axis) (23 to 125 °C)	IPC-650 2.4.41 / ASTM D 3386	ppm/°C	13	ppm/°C	13
CTE (Z axis) (23 to 125 °C)	IPC-650 2.4.41 / ASTM D 3386	ppm/°C	34	ppm/°C	34
Density	ASTM D 792	g/cm ³	2.35	g/cm ³	2.35
Hardness	ASTM D 2240 (Shore D)		79.1		79.1
Strain at Break (MD)	ASTM D 790 / IPC-650 2.4.4	%	0.014	%	0.014
Strain at Break (CD)	ASTM D 790 / IPC-650 2.4.4	%	0.013	%	0.013
Specific Heat	ASTM E 1269-05, E 967-08, E 968-02	j/(g °C)	0.940	j(g °C)	0.940
T _d (2% Wt. Loss)	IPC-650 2.4.24.6/TGA	°F	788	°C	420
T _d (5% Wt. Loss)	IPC-650 2.4.24.6/TGA	°F	817	°C	436

All reported values are typical and should not be used for specification purposes. In all instances, the user shall determine suitability in any given application.