

Property	Typical Value <sup>[1]</sup> RT/duroid 6035HTC	Direction	Units	Condition	Test Method
Dielectric Constant, $\epsilon_r$ Process	3.50 ± 0.05	Z		10 GHz/23°C	IPC-TM-650 2.5.5.5 Clamped Stripline
<sup>[2]</sup> Dielectric Constant, $\epsilon_r$ Design	3.6	Z		8 GHz - 40 GHz	Differential Phase Length Method
Dissipation Factor,	0.0013	Z		10 GHz/23°C	IPC-TM-650, 2.5.5.5
Thermal Coefficient of $\epsilon_r$	-66	Z	ppm/°C	-50°C to 150°C	mod IPC-TM-650, 2.5.5.5
Volume Resistivity	10 <sup>8</sup>		MΩ·cm	COND A	IPC-TM-650, 2.5.17.1
Surface Resistivity	10 <sup>8</sup>		MΩ	COND A	IPC-TM-650, 2.5.17.1
Tensile Modulus	329 244	MD CMD	kpsi	40 hrs @ 23°C/50RH	ASTM D638
Dimensional Stability	-0.11 -0.08	CMD MD	mm/m (mils/inch)	0.030" 1 oz EDC foil Thickness after etch +E4/105	IPC-TM-650, 2.4.39A
Coefficient of Thermal Expansion (-55 to 288 °C)	19	X	ppm/°C	23°C/50% RH	IPC-TM-650 2.4.41
	19	Y			
	39	Z			
Thermal Conductivity	1.44		W/m/K	80°C	ASTM C518
Moisture Absorption	0.06		%	D24/23	IPC-TM-650 2.6.2.1 ASTM D570
Density	2.2		gm/cm <sup>3</sup>	23°C	ASTM D-792
Copper Peel Strength	7.9		pli	20 sec.@ 288°C	IPC-TM-650 2.4.8
Flammability	V-0				UL 94
Lead-Free Process Compatible	YES				

[1] Typical values are a representation of an average value for the population of the property. For specification values contact Rogers Corporation.

[2] The design Dk is an average number from several different tested lots of material and on the most common thickness/s. If more detailed information is required, please contact Rogers Corporation. Refer to Rogers' technical paper "Dielectric Properties of High Frequency Materials" available at <http://www.rogerscorp.com>.

Standard Thickness	Standard Panel Size:	Standard Copper Cladding
0.010" (0.254mm)	12" X 18" (305 X457mm) 24" X 18" (610 X 457mm)	½ oz. (18µm) Electrodeposited copper foil (HH/HH)
0.020" (0.508mm)		1 oz. (35µm) Electrodeposited copper foil (H1/H1)
0.030" (0.762mm)		2 oz. (70µm) Electrodeposited copper foil (H2/H2)
0.060" (1.524mm)		½ oz. (18µm) Reverse treat copper foil (SH/SH)
		1 oz. (35µm) Reverse treat copper foil (S1/S1)

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