Parameter table for conventional FR4

When choosing different types of circuit board, there are multiple strategies to consider, such as referencing performance parameters. The following table shows the parameter table for conventional FR4:

Test Items		Processing Conditions	Unit	Performance Parameter	
				Reference Value	Typical Values
Tg		DSC	℃	≥130	
Combustibility		C-48/23/50	—	V-0	V-0
		E-24/125			
Volume Resistivity		After immersion	MΩ-cm	≥10^6	2.0*10^8
		E-24/127		≥10^3	5.0*10^8
Surface Resistivity		After immersion	MΩ	≥10^4	3.0*10^7
		E-24/125		≥10^3	5.0*10^7
Anti ARC		D-48/50+D-0.5/23	S	≥60	115
Dielectric Breakdown		D-48/50+D-0.5/23	KV	≥40	55
Dielectric Constant (1MHZ)		C-24/23/50	—	≤5.4	4.7
Dielectric Loss Angle (1MHZ)		C-24/23/50	—	≤0.035	0.01
Bending Strength	Horizontal	A	Mpa	≥415	450
	Portrait			≥345	400
Water Absorption		D-24/23	%	≤0.5	0.1
CI		JPCA-ES-01-2003-Standard	%	≤0.09	0.05
Br		JPCA-ES-01-2003-Standard	%	≤0.09	0

Remark:
1.All test data comply with IPC-4101/92 standard
2.Sample thickness: 1.6 mm
3.C=humid condition
4.D = Immersion in distilled water condition
5.E=temperature condition
6.Tg=Glass transition temperature, the plate undergoes softening deformation at high temperature and is accompanied by a sharp decline in mechanical and electrical properties