

# KB

# PI-515G/PP-PI515G Line up

## Electrical Properties

### 1) CORE (PI-515G)

Thinckness (mil) $\pm 10\%$	Thinckness (mm) $\pm 10\%$	Layup	Dk $\pm 0.2$				Df $\pm 10\%$			
			1GHz	2GHz	5GHz	10GHz	1GHz	2GHz	5GHz	10GHz
2.0	0.051	106 $\times$ 1	4.1	4.0	3.9	3.9	0.015	0.016	0.017	0.018
2.5	0.064	1067 $\times$ 1	4.1	4.1	4.0	3.9	0.015	0.016	0.017	0.018
3.0	0.076	1080 $\times$ 1	4.2	4.1	4.1	4.0	0.014	0.015	0.016	0.017
3.5	0.089	3313 $\times$ 1	4.5	4.4	4.4	4.3	0.013	0.014	0.015	0.016
4.0	0.102	2116 $\times$ 1	4.6	4.5	4.5	4.4	0.012	0.014	0.014	0.016
4.5	0.114	2116 $\times$ 1	4.5	4.5	4.4	4.3	0.013	0.014	0.015	0.016
5.0	0.127	2165 $\times$ 1	4.6	4.5	4.4	4.4	0.013	0.014	0.015	0.016
5.5	0.140	1506*1	4.7	4.6	4.6	4.5	0.012	0.013	0.014	0.015
6.0	0.152	1506*1	4.6	4.6	4.5	4.4	0.012	0.013	0.014	0.015
7.5	0.191	7628*1	4.6	4.6	4.5	4.5	0.012	0.013	0.014	0.015
8.0	0.203	7628*1	4.6	4.5	4.4	4.4	0.012	0.014	0.014	0.016
10.0	0.254	2165*2	4.5	4.5	4.4	4.4	0.013	0.014	0.015	0.016
12.0	0.305	1506*2	4.7	4.6	4.6	4.5	0.012	0.013	0.014	0.015
15.0	0.381	7628*2	4.6	4.6	4.5	4.5	0.012	0.013	0.014	0.015
18.0	0.457	7628 $\times$ 2+1080 $\times$ 1	4.6	4.5	4.5	4.4	0.012	0.014	0.014	0.016
21.0	0.533	7628*3	4.7	4.6	4.6	4.5	0.012	0.013	0.014	0.015
25.0	0.635	7628*3	4.5	4.5	4.4	4.4	0.013	0.014	0.015	0.016
30.0	0.762	7628*4	4.6	4.6	4.5	4.5	0.012	0.013	0.014	0.015
35.0	0.889	7628*5	4.7	4.6	4.6	4.5	0.012	0.013	0.014	0.015
40.0	1.016	7628*5	4.6	4.5	4.4	4.4	0.012	0.014	0.014	0.016
47.0	1.194	7628*6	4.7	4.6	4.5	4.5	0.012	0.013	0.014	0.015
59.0	1.499	7628*8	4.7	4.6	4.6	4.5	0.012	0.013	0.014	0.015



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## Electrical Properties

### 2) PREPREG (PP-PI515G)

Glass style	Thickness (mil) $\pm 10\%$	Thickness (mm) $\pm 10\%$	RC%	Dk $\pm 0.2$				Df $\pm 10\%$			
				1GHz	2GHz	5GHz	10GHz	1GHz	2GHz	5GHz	10GHz
106	1.98	0.050	71	4.1	4.1	4.0	3.9	0.015	0.015	0.016	0.017
	2.14	0.054	73	4.1	4.0	3.9	3.9	0.015	0.016	0.017	0.017
	2.30	0.058	75	4.0	4.0	3.9	3.8	0.016	0.016	0.017	0.017
1067	2.35	0.060	72	4.1	4.0	4.0	3.9	0.015	0.016	0.017	0.017
	2.70	0.069	74	4.0	4.0	3.9	3.9	0.016	0.016	0.017	0.017
	3.00	0.076	76	4.0	4.0	3.9	3.9	0.016	0.016	0.017	0.017
1080/1078	2.76	0.070	62	4.3	4.2	4.2	4.1	0.014	0.014	0.015	0.016
	3.06	0.078	65	4.2	4.2	4.1	4.0	0.014	0.015	0.016	0.016
	3.40	0.086	68	4.2	4.1	4.0	4.0	0.014	0.015	0.016	0.017
1086	3.30	0.084	66	4.2	4.2	4.1	4.1	0.014	0.015	0.016	0.016
	3.61	0.092	68	4.2	4.2	4.1	4.0	0.014	0.015	0.016	0.017
	3.78	0.096	70	4.2	4.1	4.1	4.0	0.014	0.015	0.016	0.017
3313	3.50	0.089	52	4.5	4.4	4.4	4.3	0.013	0.014	0.015	0.015
	3.76	0.096	55	4.4	4.4	4.3	4.3	0.013	0.014	0.015	0.015
	4.13	0.105	58	4.4	4.3	4.2	4.2	0.013	0.014	0.015	0.016
2116	4.54	0.115	52	4.5	4.4	4.4	4.3	0.013	0.014	0.015	0.015
	4.79	0.122	54	4.5	4.4	4.3	4.3	0.013	0.014	0.015	0.015
	5.06	0.129	56	4.4	4.4	4.3	4.2	0.013	0.014	0.015	0.015
2165	5.23	0.133	52	4.6	4.5	4.5	4.4	0.013	0.013	0.014	0.014
	5.70	0.145	54	4.5	4.4	4.4	4.3	0.013	0.014	0.014	0.015
	6.06	0.154	56	4.5	4.4	4.4	4.3	0.013	0.013	0.014	0.015
1506	5.81	0.148	44	4.7	4.6	4.5	4.5	0.012	0.013	0.014	0.014
	6.12	0.155	46	4.6	4.6	4.5	4.4	0.012	0.013	0.014	0.014
	6.43	0.163	48	4.6	4.5	4.4	4.4	0.012	0.013	0.014	0.015
7628	7.43	0.189	44	4.7	4.6	4.5	4.5	0.012	0.013	0.014	0.014
	7.99	0.203	47	4.6	4.5	4.5	4.4	0.012	0.013	0.014	0.015
	8.61	0.219	50	4.5	4.5	4.4	4.4	0.013	0.013	0.014	0.015