

Base Material Line Up



1.Thin Core (Synamic8G)

Typical Thickness		Ply-up	RC, %	Typical Dk					Typical Df				
mil	mm			1 GHz	3GHz	5GHz	10 GHz	15GHz	1 GHz	3GHz	5GHz	10 GHz	15GHz
2.0	0.051	1x1035	66	3.41	3.41	3.40	3.40	3.39	0.0019	0.0022	0.0025	0.0028	0.0031
2.5	0.064	1x1035	72	3.23	3.23	3.22	3.22	3.21	0.0016	0.0019	0.0022	0.0025	0.0028
2.5	0.064	1x1078	59	3.57	3.57	3.56	3.56	3.55	0.0022	0.0025	0.0028	0.0031	0.0034
3.0	0.076	1x1078	64	3.44	3.44	3.43	3.43	3.42	0.0019	0.0022	0.0025	0.0028	0.0031
3.5	0.089	1x1078	69	3.29	3.29	3.28	3.28	3.27	0.0017	0.0020	0.0023	0.0026	0.0029
3.5	0.089	1x1086	67	3.40	3.40	3.39	3.39	3.38	0.0018	0.0021	0.0024	0.0027	0.0030
4.0	0.102	1x3313	56	3.65	3.65	3.64	3.64	3.63	0.0023	0.0026	0.0029	0.0032	0.0035
4.0	0.102	2x1035	66	3.41	3.41	3.40	3.40	3.39	0.0019	0.0022	0.0025	0.0028	0.0031
4.0	0.102	1x1086	71	3.25	3.25	3.24	3.24	3.23	0.0017	0.0020	0.0023	0.0026	0.0029
4.5	0.114	2x1035	69	3.33	3.33	3.32	3.32	3.31	0.0017	0.0020	0.0023	0.0026	0.0029
4.5	0.114	1x3313	60	3.54	3.54	3.53	3.53	3.52	0.0021	0.0024	0.0027	0.0030	0.0033
5.0	0.127	1x2116	55	3.67	3.67	3.66	3.66	3.65	0.0023	0.0026	0.0029	0.0032	0.0035
5.0	0.127	2x1035	72	3.23	3.23	3.22	3.22	3.21	0.0016	0.0019	0.0022	0.0025	0.0028
5.0	0.127	2x1078	59	3.57	3.57	3.56	3.56	3.55	0.0022	0.0025	0.0028	0.0031	0.0034
5.5	0.140	1x2116	59	3.57	3.57	3.56	3.56	3.55	0.0022	0.0025	0.0028	0.0031	0.0034
6.0	0.152	2x1078	64	3.44	3.44	3.43	3.43	3.42	0.0019	0.0022	0.0025	0.0028	0.0031
7.0	0.178	2x1086	67	3.40	3.40	3.39	3.39	3.38	0.0018	0.0021	0.0024	0.0027	0.0030
8.0	0.203	2x3313	56	3.65	3.65	3.64	3.64	3.63	0.0023	0.0026	0.0029	0.0032	0.0035
10.0	0.254	2x2116	55	3.67	3.67	3.66	3.66	3.65	0.0023	0.0026	0.0029	0.0032	0.0035
12.0	0.306	3x3313	56	3.65	3.65	3.64	3.64	3.63	0.0023	0.0026	0.0029	0.0032	0.0035
16.0	0.406	4x2116	47	3.76	3.76	3.75	3.75	3.74	0.0026	0.0030	0.0033	0.0036	0.0040

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20.0	0.508	5x2116	47	3.76	3.76	3.75	3.75	3.74	0.0026	0.0030	0.0033	0.0036	0.0040
25.0	0.635	5x2116	55	3.67	3.67	3.66	3.66	3.65	0.0023	0.0026	0.0029	0.0032	0.0035
28.0	0.711	7x2116	47	3.76	3.76	3.75	3.75	3.74	0.0026	0.0030	0.0033	0.0036	0.0040
30.0	0.762	6x2116	55	3.67	3.67	3.66	3.66	3.65	0.0023	0.0026	0.0029	0.0032	0.0035
36.0	0.914	9x2116	47	3.76	3.76	3.75	3.75	3.74	0.0026	0.0030	0.0033	0.0036	0.0040
40.0	1.016	10x2116	47	3.76	3.76	3.75	3.75	3.74	0.0026	0.0030	0.0033	0.0036	0.0040

2.Prepreg (Synamic8GB)

Glass style (E-glass)	RC (%)	Thickness		Typical Dk					Typical Df				
		mil	mm	1 GHz	3GHz	5GHz	10 GHz	15GHz	1 GHz	3GHz	5GHz	10 GHz	15GHz
1035	69	2.3	0.057	3.33	3.33	3.32	3.32	3.31	0.0017	0.0020	0.0023	0.0026	0.0029
1035	72	2.5	0.064	3.23	3.23	3.22	3.22	3.21	0.0016	0.0019	0.0022	0.0025	0.0028
1035	74	2.7	0.068	3.17	3.17	3.16	3.16	3.15	0.0015	0.0018	0.0021	0.0024	0.0027
1078	64	3.0	0.076	3.44	3.44	3.43	3.43	3.42	0.0019	0.0022	0.0025	0.0028	0.0031
1078	67	3.3	0.084	3.34	3.34	3.33	3.33	3.32	0.0018	0.0021	0.0024	0.0027	0.0030
1078	69	3.5	0.089	3.29	3.29	3.28	3.28	3.27	0.0017	0.0020	0.0023	0.0026	0.0029
1078	72	4.0	0.102	3.20	3.20	3.19	3.19	3.18	0.0016	0.0019	0.0022	0.0025	0.0028
1080	69	3.5	0.089	3.29	3.29	3.28	3.28	3.27	0.0017	0.0020	0.0023	0.0026	0.0029
3313	56	4.0	0.102	3.65	3.65	3.64	3.64	3.63	0.0023	0.0026	0.0029	0.0032	0.0035
3313	60	4.5	0.114	3.54	3.54	3.53	3.53	3.52	0.0021	0.0024	0.0027	0.0030	0.0033
2116	55	5.0	0.127	3.67	3.67	3.66	3.66	3.65	0.0023	0.0026	0.0029	0.0032	0.0035
2116	59	5.5	0.139	3.57	3.57	3.56	3.56	3.55	0.0022	0.0025	0.0028	0.0031	0.0034

Remark:

- 1) Dk/Df measuring method: IPC TM-650 2.5.5.5;
- 2) The above data is for reference only. SYTECH reserves the right for any update.