

Base Material Line Up



Synamic 6 /Synamic 6B

1. CORE (C-STAGE)

Thickness		ply-up	RC (%)	Dk						Df					
mm	mil			1 GHz	3 GHz	5 GHz	10GHz	15GHz	28GHz	1 GHz	3 GHz	5 GHz	10GHz	15GHz	28GHz
0.051	2.00	1*1035	67	3.42	3.42	3.42	3.42	3.41	3.41	0.0023	0.0026	0.0029	0.0032	0.0035	0.0041
0.051	2.00	1*106	74	3.21	3.21	3.21	3.21	3.20	3.20	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
0.064	2.50	1*1035	73	3.24	3.24	3.24	3.24	3.23	3.23	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
0.076	3.00	1*1078	65	3.45	3.45	3.45	3.45	3.44	3.44	0.0023	0.0026	0.0029	0.0032	0.0035	0.0042
0.076	3.00	1*1080	65	3.45	3.45	3.45	3.45	3.44	3.44	0.0023	0.0026	0.0029	0.0032	0.0035	0.0042
0.089	3.50	1*1078	70	3.31	3.31	3.31	3.31	3.30	3.30	0.0021	0.0024	0.0027	0.0030	0.0033	0.0039
0.089	3.50	1*1080	70	3.31	3.31	3.31	3.31	3.30	3.30	0.0021	0.0024	0.0027	0.0030	0.0033	0.0039
0.102	4.00	1*3313	57	3.66	3.66	3.66	3.66	3.65	3.65	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.102	4.00	2*1035	67	3.42	3.42	3.42	3.42	3.41	3.41	0.0023	0.0026	0.0029	0.0032	0.0035	0.0041
0.102	4.00	2*106	74	3.21	3.21	3.21	3.21	3.20	3.20	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
0.114	4.50	1*3313	61	3.55	3.55	3.55	3.55	3.54	3.54	0.0025	0.0028	0.0031	0.0034	0.0037	0.0043
0.127	5.00	1*2116	56	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.127	5.00	2*1035	73	3.24	3.24	3.24	3.24	3.23	3.23	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
0.127	5.00	2*1078	60	3.58	3.58	3.58	3.58	3.57	3.57	0.0026	0.0029	0.0032	0.0035	0.0038	0.0044
0.140	5.50	1*2116	60	3.58	3.58	3.58	3.58	3.57	3.57	0.0026	0.0029	0.0032	0.0035	0.0038	0.0044
0.152	6.00	2*1078	65	3.45	3.45	3.45	3.45	3.44	3.44	0.0023	0.0026	0.0029	0.0032	0.0035	0.0041
0.152	6.00	2*1080	65	3.45	3.45	3.45	3.45	3.44	3.44	0.0023	0.0026	0.0029	0.0032	0.0035	0.0041
0.178	7.00	2*1078	70	3.31	3.31	3.31	3.31	3.30	3.30	0.0021	0.0024	0.0027	0.0030	0.0033	0.0039
0.178	7.00	2*1080	70	3.31	3.31	3.31	3.31	3.30	3.30	0.0021	0.0024	0.0027	0.0030	0.0033	0.0039

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0.203	8.00	2*3313	57	3.66	3.66	3.66	3.66	3.65	3.65	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.254	10.00	2*2116	56	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.306	12.00	3*3313	57	3.66	3.66	3.66	3.66	3.65	3.65	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.381	15.00	3*2116	56	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.457	18.00	4*2116	52	3.80	3.80	3.80	3.80	3.79	3.79	0.0029	0.0032	0.0035	0.0038	0.0041	0.0047
0.508	20.00	4*2116	56	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.635	25.00	5*2116	56	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.711	28.00	6*2116	54	3.74	3.74	3.74	3.74	3.73	3.73	0.0029	0.0032	0.0035	0.0038	0.0041	0.0047
0.762	30.00	6*2116	56	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
0.889	35.00	7*2116	56	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
1.016	40.00	8*2116	56	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045

2. PREPREG (B-STAGE)

Glass style	RC (%) Nominal	Thickness		Dk						Df					
		mm	mil	1GHz	3GHz	5GHz	10GHz	15GHz	28GHz	1 GHz	3 GHz	5 GHz	10GHz	15GHz	28GHz
106	74	0.053	2.10	3.21	3.21	3.21	3.21	3.20	3.20	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
106	76	0.058	2.30	3.13	3.13	3.13	3.13	3.12	3.12	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
106	78	0.064	2.50	3.09	3.09	3.09	3.09	3.08	3.08	0.0019	0.0022	0.0025	0.0028	0.0031	0.0037
1035	67	0.051	2.00	3.42	3.42	3.42	3.42	3.41	3.41	0.0023	0.0026	0.0029	0.0032	0.0035	0.0041
1035	73	0.064	2.50	3.24	3.24	3.24	3.24	3.23	3.23	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
1035	75	0.069	2.70	3.18	3.18	3.18	3.18	3.17	3.17	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
1078	63	0.071	2.80	3.50	3.50	3.50	3.50	3.49	3.49	0.0024	0.0027	0.0030	0.0033	0.0036	0.0042
1078	65	0.076	3.00	3.45	3.45	3.45	3.45	3.44	3.44	0.0023	0.0026	0.0029	0.0032	0.0035	0.0041

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1078	70	0.089	3.50	3.31	3.31	3.31	3.31	3.30	3.30	0.0021	0.0024	0.0027	0.0030	0.0033	0.0039
1078	73	0.102	4.00	3.21	3.21	3.21	3.21	3.20	3.20	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
1078	76	0.114	4.50	3.13	3.13	3.13	3.13	3.12	3.12	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
1080	63	0.071	2.80	3.50	3.50	3.50	3.50	3.49	3.49	0.0024	0.0027	0.0030	0.0033	0.0036	0.0042
1080	65	0.076	3.00	3.45	3.45	3.45	3.45	3.44	3.44	0.0023	0.0026	0.0029	0.0032	0.0035	0.0041
1080	70	0.089	3.50	3.31	3.31	3.31	3.31	3.30	3.30	0.0021	0.0024	0.0027	0.0030	0.0033	0.0039
1080	73	0.102	4.00	3.21	3.21	3.21	3.21	3.20	3.20	0.0020	0.0023	0.0026	0.0029	0.0032	0.0038
3313	57	0.102	4.00	3.66	3.66	3.66	3.66	3.65	3.65	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
3313	59	0.109	4.30	3.61	3.61	3.61	3.61	3.60	3.60	0.0026	0.0029	0.0032	0.0035	0.0038	0.0044
3313	61	0.114	4.50	3.55	3.55	3.55	3.55	3.54	3.54	0.0025	0.0028	0.0031	0.0034	0.0037	0.0043
2116	56	0.127	5.00	3.68	3.68	3.68	3.68	3.67	3.67	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
2116	58	0.134	5.30	3.63	3.63	3.63	3.63	3.62	3.62	0.0027	0.0030	0.0033	0.0036	0.0039	0.0045
2116	60	0.140	5.50	3.58	3.58	3.58	3.58	3.57	3.57	0.0026	0.0029	0.0032	0.0035	0.0038	0.0044

3. REMARK

- 1) Dk/Df test method: IPC TM-650 2.5.5.5
- 2) Copper foil: HVLP2 18, 35μm, RTF2 18, 35, 70μm.
- 3) For laminate orders, we will follow metric thickness accuracy of 3 decimal places for control.
- 4) Updated date: August, 2023
- 5) All the values listed above are for your reference only. Please contact Shengyi Technology Co., Ltd. for detailed information. All rights from this line up are reserved by Shengyi Technology Co., Ltd.