

# Based Material Line Up



## S7045G/S7045GB

### 1. CORE (C-STAGE)

Thickness		ply-up	RC (%)	Dk				Df			
mm	mil			1 GHz	3 GHz	5 GHz	10 GHz	1 GHz	3 GHz	5 GHz	10 GHz
0.050	2.00	1*106	72%	3.85	3.84	3.84	3.79	0.013	0.015	0.015	0.015
0.076	3.00	1*1080	64%	4.02	4.01	4.00	3.96	0.012	0.014	0.014	0.014
0.076	3.00	1*1078	64%	4.02	4.01	4.00	3.96	0.012	0.014	0.014	0.014
0.076	3.00	1*1086	60%	4.09	4.08	4.08	4.04	0.012	0.013	0.013	0.014
0.089	3.50	1*3313	52%	4.26	4.25	4.25	4.21	0.011	0.012	0.012	0.013
0.102	4.00	1*3313	56%	4.18	4.17	4.17	4.13	0.011	0.013	0.013	0.013
0.102	4.00	2*106	72%	3.85	3.84	3.84	3.79	0.013	0.015	0.015	0.015
0.102	4.00	2*1067	65%	3.99	3.98	3.98	3.94	0.012	0.014	0.014	0.014
0.114	4.50	1*2116	52%	4.26	4.25	4.25	4.21	0.011	0.012	0.012	0.013
0.127	5.00	1*2116	55%	4.20	4.19	4.19	4.15	0.011	0.013	0.013	0.013
0.127	5.00	2*1080	58%	4.16	4.15	4.14	4.09	0.011	0.013	0.013	0.013
0.127	5.00	2*1067	72%	3.85	3.84	3.84	3.79	0.013	0.015	0.015	0.015
0.152	6.00	2*1080	64%	4.02	4.01	4.00	3.96	0.012	0.014	0.014	0.014
0.152	6.00	2*1078	64%	4.02	4.01	4.00	3.96	0.012	0.014	0.014	0.014
0.152	6.00	1*1506	44%	4.43	4.42	4.42	4.38	0.010	0.012	0.012	0.012
0.178	7.00	2*3313	52%	4.26	4.25	4.25	4.21	0.011	0.012	0.012	0.013

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0.203	8.00	1*7628	46%	4.39	4.38	4.38	4.34	0.010	0.012	0.012	0.012
0.203	8.00	2*3313	56%	4.18	4.17	4.17	4.13	0.011	0.013	0.013	0.013
0.254	10.00	2*2116	55%	4.20	4.19	4.19	4.15	0.011	0.013	0.013	0.013
0.305	12.00	2*1506	44%	4.43	4.42	4.42	4.38	0.010	0.012	0.012	0.012
0.305	12.00	3*3313	56%	4.18	4.17	4.17	4.13	0.011	0.013	0.013	0.013
0.381	15.00	3*2116	55%	4.20	4.19	4.19	4.15	0.011	0.013	0.013	0.013
0.406	16.00	2*7628	46%	4.39	4.38	4.38	4.34	0.010	0.012	0.012	0.012
0.406	16.00	4*3313	56%	4.18	4.17	4.17	4.13	0.011	0.013	0.013	0.013
0.457	18.00	2*7628+1080	46%	4.39	4.38	4.38	4.34	0.010	0.012	0.012	0.012
0.457	18.00	4*2116	52%	4.26	4.25	4.25	4.21	0.011	0.012	0.012	0.013
0.508	20.00	2*7628+2116	46%	4.39	4.38	4.38	4.34	0.010	0.012	0.012	0.012
0.508	20.00	4*2116	55%	4.20	4.19	4.19	4.15	0.011	0.013	0.013	0.013
0.610	24.00	3*7628	46%	4.39	4.38	4.38	4.34	0.010	0.012	0.012	0.012
0.610	24.00	6*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
0.635	25.00	6*2116	49%	4.33	4.32	4.32	4.28	0.011	0.012	0.012	0.012
0.711	28.00	4*7628	40%	4.52	4.51	4.51	4.47	0.010	0.011	0.011	0.011
0.711	28.00	6*2116	53%	4.25	4.24	4.24	4.19	0.011	0.012	0.013	0.013
0.762	30.00	7*2116	50%	4.31	4.30	4.30	4.26	0.011	0.012	0.012	0.012
0.813	32.00	4*7628	46%	4.39	4.38	4.38	4.34	0.010	0.012	0.012	0.012
0.813	32.00	8*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
0.914	36.00	9*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
0.940	37.00	5*7628	43%	4.46	4.45	4.45	4.41	0.010	0.012	0.012	0.012

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1.016	40.00	10*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
1.118	44.00	11*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
1.118	44.00	6*7628	43%	4.46	4.45	4.45	4.41	0.010	0.012	0.012	0.012
1.219	48.00	12*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
1.321	52.00	13*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
1.321	52.00	7*7628	43%	4.46	4.45	4.45	4.41	0.010	0.012	0.012	0.012
1.422	56.00	14*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
1.524	60.00	15*2116	47%	4.37	4.36	4.36	4.32	0.010	0.012	0.012	0.012
1.524	60.00	8*7628	44%	4.43	4.42	4.42	4.38	0.010	0.012	0.012	0.012

## 2. PREPREG (B-STAGE)

Glass style	RC (%) Nominal	Thickness		Dk				Df			
		mm	mil	1GHz	3GHz	5GHz	10GHz	1 GHz	3 GHz	5 GHz	10 GHz
106	72%	0.050	2.00	3.85	3.84	3.84	3.79	0.013	0.015	0.015	0.015
106	76%	0.060	2.40	3.76	3.75	3.75	3.70	0.013	0.015	0.015	0.016
1067	70%	0.060	2.40	3.88	3.88	3.87	3.83	0.013	0.015	0.015	0.015
1067	76%	0.076	3.00	3.76	3.75	3.75	3.70	0.013	0.015	0.015	0.016
1078/1080	60%	0.067	2.60	4.09	4.08	4.08	4.04	0.012	0.013	0.013	0.014
1078/1080	64%	0.076	3.00	4.02	4.01	4.00	3.96	0.012	0.014	0.014	0.014
1078/1080	66%	0.081	3.20	3.96	3.96	3.95	3.91	0.012	0.014	0.014	0.014
1078/1080	68%	0.087	3.40	3.92	3.92	3.91	3.87	0.012	0.014	0.015	0.015
1078/1080	70%	0.094	3.70	3.88	3.88	3.87	3.83	0.013	0.015	0.015	0.015
1086	66%	0.091	3.60	3.96	3.96	3.95	3.91	0.012	0.014	0.014	0.014

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1086	68%	0.097	3.80	3.92	3.92	3.91	3.87	0.012	0.014	0.015	0.015
3313	54%	0.097	3.80	4.22	4.21	4.21	4.17	0.011	0.013	0.013	0.013
3313	56%	0.102	4.00	4.18	4.17	4.17	4.13	0.011	0.013	0.013	0.013
3313	58%	0.109	4.30	4.15	4.14	4.14	4.09	0.011	0.013	0.013	0.013
2116	52%	0.115	4.50	4.26	4.25	4.25	4.21	0.011	0.012	0.012	0.013
2116	55%	0.127	5.00	4.20	4.19	4.19	4.15	0.011	0.013	0.013	0.013
2116	58%	0.135	5.30	4.15	4.14	4.14	4.09	0.011	0.013	0.013	0.013
2116	60%	0.145	5.70	4.09	4.08	4.08	4.04	0.012	0.013	0.013	0.014
1506	45%	0.155	6.10	4.41	4.40	4.40	4.36	0.010	0.012	0.012	0.012
1506	48%	0.165	6.50	4.35	4.34	4.34	4.30	0.011	0.012	0.012	0.012
1506	50%	0.175	6.90	4.31	4.30	4.30	4.26	0.011	0.012	0.012	0.012
7628	43%	0.188	7.40	4.46	4.45	4.45	4.41	0.010	0.012	0.012	0.012
7628	46%	0.203	8.00	4.39	4.38	4.38	4.34	0.010	0.012	0.012	0.012
7628	48%	0.215	8.46	4.35	4.34	4.34	4.30	0.011	0.012	0.012	0.012

### 3. REMARK

- 1) Dk/Df measuring method: IPC TM-650 2.5.5.5;
- 2) All the values listed above 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.
- 3) The thick glass fabrics are used for special core and prepreg specification, please evaluate your process capacity if the design pitch  $\leq 1.0\text{mm}$ .
- 4) Last update: May. 2021.