

# Base Material Line Up



## SML02G/ SML02GB

### 1. CORE (C-STAGE)

Thickness		ply-up	RC(%)	Dk					Df				
mm	mil			1GHz	3GHz	5GHz	10GHz	15GHz	1 GHz	3 GHz	5 GHz	10GHz	15GHz
0.051	2.0	1*106	75%	3.87	3.90	3.88	3.87	3.86	0.0064	0.0074	0.0076	0.0076	0.0076
0.064	2.5	1*106	80%	3.77	3.81	3.77	3.76	3.76	0.0072	0.0076	0.0077	0.0077	0.0077
0.076	3.0	1*1080	68%	3.95	4.10	4.07	4.07	4.07	0.0062	0.0073	0.0072	0.0072	0.0072
0.076	3.0	2*1027	73%	3.89	3.95	3.93	3.92	3.92	0.0063	0.0073	0.0075	0.0075	0.0075
0.089	3.5	2*1027	77%	3.83	3.85	3.83	3.82	3.81	0.0066	0.0075	0.0076	0.0076	0.0076
0.102	4.0	1*3313	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
0.102	4.0	2*106	75%	3.87	3.90	3.88	3.87	3.86	0.0064	0.0074	0.0076	0.0076	0.0076
0.114	4.5	1*3313	64%	3.98	4.22	4.19	4.18	4.18	0.0057	0.0068	0.0070	0.0070	0.0070
0.114	4.5	1*2116	56%	4.17	4.40	4.37	4.36	4.36	0.0053	0.0065	0.0068	0.0069	0.0069
0.127	5.0	1*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
0.127	5.0	2*106	80%	3.77	3.81	3.77	3.76	3.76	0.0072	0.0076	0.0077	0.0077	0.0077
0.152	6.0	2*1080	68%	3.95	4.10	4.07	4.07	4.07	0.0062	0.0073	0.0072	0.0072	0.0072
0.152	6.0	1*1506	49%	4.34	4.60	4.56	4.55	4.55	0.0051	0.0064	0.0068	0.0068	0.0068
0.178	7.0	2*1080	72%	3.90	3.98	3.96	3.95	3.95	0.0063	0.0073	0.0074	0.0074	0.0074
0.203	8.0	2*3313	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
0.203	8.0	1*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
0.254	10.0	2*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
0.305	12.0	2*1506	49%	4.34	4.60	4.56	4.55	4.55	0.0051	0.0064	0.0068	0.0068	0.0068
0.305	12.0	3*3313	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069

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0.381	15.0	3*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
0.406	16.0	2*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
0.457	18.0	4*2116	56%	4.17	4.40	4.37	4.36	4.36	0.0053	0.0065	0.0068	0.0069	0.0069
0.508	20.0	4*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
0.508	20.0	1*7628+ 1*2116+ 1*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
0.61	24.0	3*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
0.635	25.0	5*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
0.711	28.0	4*1506	55%	4.18	4.42	4.37	4.36	4.37	0.0053	0.0065	0.0069	0.0070	0.0070
0.762	30.0	6*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
0.813	32.0	4*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
0.914	36.0	8*2116	56%	4.17	4.40	4.37	4.36	4.36	0.0053	0.0065	0.0068	0.0069	0.0069
1.016	40.0	8*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
1.016	40.0	5*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
1.143	45.0	9*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
1.219	48.0	6*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
1.372	54.0	9*1506	49%	4.34	4.60	4.56	4.55	4.55	0.0051	0.0064	0.0068	0.0068	0.0068
1.422	56.0	7*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
1.524	60.0	8*1506	58%	4.16	4.33	4.31	4.30	4.30	0.0053	0.0065	0.0069	0.0070	0.0070
1.524	60.0	10*1506	49%	4.34	4.60	4.56	4.55	4.55	0.0051	0.0064	0.0068	0.0068	0.0068
1.524	60.0	12*2116	60%	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
1.626	64.0	8*7628	52%	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069

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## 2. PREPREG (B-STAGE)

Glass style	RC (%) Nominal	Thickness		Dk					Df				
		mm	mil	1GHz	3GHz	5GHz	10GHz	15GHz	1 GHz	3 GHz	5 GHz	10GHz	15GHz
106	75%	0.051	2.0	3.87	3.90	3.88	3.87	3.86	0.0064	0.0074	0.0076	0.0076	0.0076
	78%	0.058	2.3	3.81	3.83	3.81	3.79	3.79	0.0067	0.0075	0.0076	0.0076	0.0076
	80%	0.064	2.5	3.77	3.81	3.77	3.76	3.76	0.0072	0.0076	0.0077	0.0077	0.0077
	83%	0.076	3.0	3.74	3.75	3.72	3.71	3.70	0.0073	0.0077	0.0077	0.0077	0.0077
	85%	0.089	3.5	3.71	3.72	3.69	3.68	3.68	0.0074	0.0078	0.0078	0.0078	0.0078
	87%	0.102	4.0	3.69	3.68	3.66	3.65	3.64	0.0075	0.0079	0.0079	0.0079	0.0079
1067	75%	0.064	2.5	3.87	3.90	3.88	3.87	3.87	0.0064	0.0074	0.0076	0.0076	0.0076
	78%	0.071	2.8	3.81	3.83	3.81	3.79	3.79	0.0067	0.0075	0.0076	0.0076	0.0076
1080	68%	0.076	3.0	3.95	4.10	4.07	4.07	4.07	0.0062	0.0073	0.0072	0.0072	0.0072
	70%	0.081	3.2	3.92	4.04	4.02	4.01	4.01	0.0063	0.0072	0.0073	0.0073	0.0073
	72%	0.089	3.5	3.90	3.98	3.96	3.95	3.95	0.0063	0.0073	0.0074	0.0074	0.0074
	75%	0.102	4.0	3.87	3.90	3.88	3.87	3.86	0.0063	0.0074	0.0076	0.0076	0.0076
1086	72%	0.094	3.7	3.90	3.98	3.96	3.95	3.95	0.0063	0.0073	0.0074	0.0074	0.0074
	75%	0.107	4.2	3.87	3.90	3.88	3.87	3.87	0.0064	0.0074	0.0076	0.0076	0.0076
3313	60%	0.102	4.0	4.15	4.26	4.25	4.24	4.23	0.0053	0.0065	0.0068	0.0069	0.0069
	62%	0.107	4.2	4.07	4.24	4.22	4.21	4.21	0.0055	0.0067	0.0069	0.0069	0.0069
	64%	0.114	4.5	3.98	4.22	4.19	4.18	4.18	0.0057	0.0068	0.0070	0.0070	0.0070

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2116	56%	0.114	4.5	4.17	4.40	4.37	4.36	4.36	0.0053	0.0065	0.0068	0.0069	0.0069
	60%	0.127	5.0	4.15	4.26	4.25	4.24	4.24	0.0053	0.0065	0.0068	0.0069	0.0069
	62%	0.135	5.3	4.07	4.24	4.22	4.21	4.21	0.0055	0.0067	0.0069	0.0069	0.0069
	64%	0.145	5.7	3.98	4.22	4.19	4.18	4.18	0.0057	0.0068	0.0070	0.0070	0.0070
1506	49%	0.152	6.0	4.34	4.60	4.56	4.55	4.55	0.0051	0.0064	0.0068	0.0068	0.0068
	52%	0.165	6.5	4.22	4.51	4.48	4.48	4.48	0.0051	0.0065	0.0069	0.0069	0.0069
	55%	0.178	7.0	4.18	4.42	4.37	4.36	4.37	0.0053	0.0065	0.0069	0.0070	0.0070
	58%	0.191	7.5	4.16	4.33	4.31	4.30	4.30	0.0053	0.0065	0.0069	0.0070	0.0070
7628	52%	0.203	8.0	4.22	4.51	4.48	4.48	4.47	0.0051	0.0065	0.0069	0.0069	0.0069
	54%	0.216	8.5	4.20	4.46	4.43	4.42	4.42	0.0052	0.0064	0.0069	0.0070	0.0070

### 3. REMARK

- 1) 1GHz Dk/Df measuring method: IPC TM-650 2.5.5.9;
- 2) 3,5,10,15GHz Dk/Df measuring method: IPC TM-650 2.5.5.5;
- 3) Copper foil:HTE, RTF; Copper foil thickness:1/2oz,1oz and 2oz, Other types of copper foil can be option upon request;
- 4) 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.;