

Based Material Line Up



S1190G/ S1190GB

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
0.043	1.70	2X1017	67	3.83	3.81	3.79	3.74	0.012	0.013	0.014	0.014
0.051	2.00	1X106	74	3.70	3.68	3.67	3.62	0.012	0.014	0.014	0.015
0.051	2.00	1X1067	67	3.83	3.81	3.79	3.74	0.012	0.013	0.014	0.014
0.076	3.00	1X1080	65	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014
0.076	3.00	1X1078	65	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014
0.076	3.00	2X1037	67	3.83	3.81	3.79	3.74	0.012	0.013	0.014	0.014
0.076	3.00	2X1027	70	3.77	3.75	3.74	3.69	0.012	0.014	0.014	0.014
0.089	3.50	1X3313	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.089	3.50	2X1037	71	3.75	3.73	3.72	3.67	0.012	0.014	0.014	0.014
0.102	4.00	1X3313	58	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
0.102	4.00	2X106	74	3.70	3.68	3.67	3.62	0.012	0.014	0.014	0.015
0.114	4.50	1X2116	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.114	4.50	2X106	75	3.68	3.66	3.65	3.60	0.012	0.014	0.014	0.015
0.127	5.00	1X2116	57	4.03	4.01	3.99	3.94	0.011	0.012	0.012	0.013
0.127	5.00	2X1080	60	3.97	3.95	3.93	3.88	0.011	0.013	0.013	0.013
0.152	6.00	1X1506	46	4.26	4.26	4.22	4.20	0.009	0.011	0.011	0.012
0.152	6.00	2X1080	65	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014
0.178	7.00	1X7628	43	4.34	4.32	4.30	4.28	0.009	0.011	0.011	0.011
0.178	7.00	2X3313	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013

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0.203	8.00	1X7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
0.203	8.00	2X3313	58	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
0.229	9.00	2X2116	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.254	10.00	2X2116	57	4.03	4.01	3.99	3.94	0.011	0.012	0.012	0.013
0.305	12.00	2X1506	46	4.26	4.26	4.22	4.20	0.009	0.011	0.011	0.012
0.305	12.00	3X3313	58	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
0.356	14.00	2X7628	43	4.34	4.32	4.30	4.28	0.009	0.011	0.011	0.011
0.406	16.00	2X7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
0.406	16.00	4X3313	58	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
0.457	18.00	7628+1080+7628	48	4.22	4.21	4.18	4.16	0.010	0.011	0.011	0.012
0.457	18.00	4X2116	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.508	20.00	7628+2116+7628	48	4.22	4.21	4.18	4.16	0.010	0.011	0.011	0.012
0.508	20.00	4X2116	57	4.03	4.01	3.99	3.94	0.011	0.012	0.012	0.013
0.533	21.00	3X7628	43	4.34	4.32	4.30	4.28	0.009	0.011	0.011	0.011
0.610	24.00	3X7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
0.711	28.00	4X7628	43	4.34	4.32	4.30	4.28	0.009	0.011	0.011	0.011
0.762	30.00	7X2116	52	4.14	4.11	4.07	4.03	0.010	0.012	0.012	0.013
0.813	32.00	4X7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
1.016	40.00	5X7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
1.194	47.00	6X7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
1.499	59.00	8X7628	44	4.32	4.30	4.28	4.14	0.010	0.011	0.011	0.012

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2. Prepreg (B-Stage)

Glass style	RC (%) Nominal	Thickness		Dk				Df			
		mm	mil	1 GHz	3 GHz	5 GHz	10 GHz	1 GHz	3 GHz	5 GHz	10 GHz
1017	77	0.032	1.30	3.64	3.62	3.61	3.56	0.012	0.014	0.015	0.015
	81	0.039	1.50	3.56	3.55	3.54	3.49	0.013	0.015	0.015	0.016
1027	71	0.039	1.50	3.75	3.73	3.72	3.67	0.012	0.014	0.014	0.014
	75	0.046	1.80	3.68	3.66	3.65	3.60	0.012	0.014	0.014	0.015
	77	0.049	1.90	3.64	3.62	3.61	3.56	0.012	0.014	0.015	0.015
	79	0.054	2.10	3.60	3.58	3.57	3.52	0.012	0.015	0.015	0.016
1037	73	0.048	1.90	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
	75	0.053	2.10	3.68	3.67	3.65	3.61	0.012	0.014	0.015	0.015
	77	0.058	2.30	3.64	3.63	3.61	3.56	0.012	0.014	0.015	0.016
106	74	0.051	2.00	3.70	3.68	3.67	3.62	0.012	0.014	0.014	0.015
	77	0.061	2.40	3.64	3.62	3.61	3.56	0.012	0.014	0.015	0.015
	79	0.069	2.70	3.60	3.58	3.57	3.52	0.012	0.015	0.015	0.016
1067	71	0.058	2.30	3.75	3.73	3.72	3.67	0.012	0.014	0.014	0.014
	73	0.064	2.50	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
	75	0.071	2.80	3.68	3.67	3.65	3.61	0.012	0.014	0.015	0.015
	77	0.076	3.00	3.64	3.62	3.61	3.56	0.012	0.014	0.015	0.015
1080/1078	65	0.076	3.00	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014
	67	0.080	3.20	3.83	3.81	3.79	3.74	0.012	0.013	0.014	0.014
	69	0.086	3.40	3.78	3.77	3.75	3.70	0.012	0.014	0.014	0.014
	72	0.097	3.80	3.73	3.71	3.70	3.65	0.012	0.014	0.014	0.014

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	73	0.102	4.00	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
	75	0.110	4.33	3.68	3.67	3.65	3.61	0.012	0.014	0.015	0.015
3313	58	0.102	4.00	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
	61	0.114	4.50	3.95	3.93	3.91	3.86	0.011	0.013	0.013	0.013
2116	53	0.114	4.50	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
	57	0.127	5.00	4.03	4.01	3.99	3.94	0.011	0.012	0.012	0.013
	61	0.142	5.60	3.95	3.93	3.91	3.86	0.011	0.013	0.013	0.013
1506	46	0.150	5.90	4.26	4.26	4.22	4.20	0.009	0.011	0.011	0.012
	48	0.160	6.30	4.22	4.21	4.18	4.16	0.010	0.011	0.011	0.012
7628	47	0.203	8.00	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
	50	0.213	8.40	4.20	4.19	4.16	4.14	0.010	0.011	0.011	0.012

3. Remark

- 1) Dk/Df measuring method: IPC TM650-2.5.5.5C and modified TM650-2.5.5.5C
- 2) All the data listed above is for designer's reference, not guarantee value for quality spec.
- 3) Last update: September, 2024