

# Based Material Line Up



## S1150G/S1150GB

### 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
0.040	1.57	1x1037	67	4.19	4.15	4.11	4.07	0.015	0.016	0.017	0.0175
0.050	2.00	1x1067	65	4.23	4.19	4.15	4.12	0.014	0.016	0.017	0.017
0.060	2.36	1x1067	69	4.14	4.11	4.07	4.03	0.015	0.016	0.018	0.018
0.065	2.60	1x1078	61	4.33	4.29	4.25	4.21	0.014	0.015	0.016	0.017
0.075	3.00	1x1080	65	4.26	4.21	4.18	4.14	0.014	0.015	0.017	0.017
0.075	3.00	1x1086	62	4.30	4.27	4.22	4.18	0.014	0.015	0.015	0.017
0.089	3.50	1x1080	69	4.14	4.11	4.07	4.03	0.015	0.016	0.018	0.018
0.100	4.00	1x2116	48	4.65	4.56	4.54	4.53	0.012	0.013	0.014	0.014
0.120	4.70	1x2116	54	4.50	4.43	4.40	4.38	0.013	0.014	0.015	0.015
0.127	5.00	1X2116	56	4.46	4.39	4.36	4.34	0.013	0.015	0.015	0.016
0.150	6.00	1X1506	45	4.72	4.63	4.61	4.60	0.011	0.013	0.013	0.014
0.178	7.00	1x7628	42	4.80	4.69	4.67	4.67	0.011	0.013	0.013	0.013
0.200	8.00	1x7628	45	4.72	4.63	4.61	4.60	0.011	0.013	0.013	0.014
0.230	9.00	2X2116	51	4.58	4.50	4.47	4.45	0.012	0.014	0.014	0.015
0.254	10.00	2X2116	56	4.46	4.39	4.36	4.34	0.013	0.015	0.015	0.016
0.280	11.00	2116+1080+2116	52	4.55	4.48	4.45	4.43	0.012	0.014	0.015	0.015
0.300	12.00	2X1506	45	4.72	4.63	4.61	4.60	0.011	0.013	0.013	0.014
0.330	13.00	1080+7628+1080	51	4.58	4.50	4.47	4.45	0.012	0.014	0.014	0.015
0.360	14.00	2X7628	43	4.77	4.67	4.65	4.65	0.011	0.013	0.013	0.013

# Based Material Line Up



0.380	15.00	2X7628	43	4.77	4.67	4.65	4.65	0.011	0.013	0.013	0.013
0.400	15.70	2X7628	46	4.70	4.61	4.58	4.57	0.011	0.013	0.014	0.014
0.500	19.69	7628+2116+7628	45	4.72	4.63	4.61	4.60	0.011	0.013	0.013	0.014
0.600	23.60	3X7628	46	4.70	4.61	4.58	4.57	0.011	0.013	0.014	0.014
0.660	25.98	1506+2x7628+1506	44	4.75	4.65	4.63	4.63	0.011	0.013	0.013	0.013
0.800	31.50	4X7628	46	4.70	4.61	4.58	4.57	0.011	0.013	0.014	0.014
1.000	39.40	5X7628	46	4.70	4.61	4.58	4.57	0.011	0.013	0.014	0.014
1.200	47.00	6X7628	46	4.70	4.61	4.58	4.57	0.011	0.013	0.014	0.014

## 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
7628	43	0.190	7.48	4.77	4.67	4.65	4.65	0.011	0.013	0.013	0.013
7628	45	0.199	7.83	4.72	4.63	4.61	4.60	0.011	0.013	0.013	0.014
7628	48	0.214	8.43	4.65	4.56	4.54	4.53	0.012	0.013	0.014	0.014
7628	50	0.225	8.86	4.60	4.52	4.49	4.48	0.012	0.014	0.014	0.015
1506	45	0.156	6.14	4.72	4.63	4.61	4.60	0.011	0.013	0.013	0.014
1506	48	0.168	6.61	4.65	4.56	4.54	4.53	0.012	0.013	0.014	0.014
2116	54	0.124	4.88	4.50	4.43	4.40	4.38	0.013	0.014	0.015	0.015
2116	57	0.134	5.28	4.43	4.37	4.33	4.31	0.013	0.015	0.015	0.016
2313	55	0.099	3.90	4.48	4.41	4.38	4.36	0.013	0.014	0.015	0.015
2313	57	0.105	4.13	4.43	4.37	4.33	4.31	0.013	0.015	0.015	0.016
1080/1078	63	0.074	2.91	4.28	4.24	4.20	4.16	0.014	0.015	0.016	0.017

# Based Material Line Up



1080/1078	66	0.083	3.27	4.21	4.17	4.13	4.09	0.015	0.016	0.017	0.017
1080/1078	68	0.088	3.46	4.17	4.13	4.09	4.05	0.015	0.016	0.017	0.018
1086	62	0.078	3.07	4.30	4.27	4.22	4.18	0.014	0.015	0.015	0.017
1086	65	0.088	3.46	4.23	4.19	4.15	4.12	0.014	0.016	0.017	0.017
1086	69	0.102	4.02	4.14	4.11	4.07	4.03	0.015	0.016	0.018	0.018
106	73	0.054	2.13	4.04	4.02	3.97	3.92	0.016	0.017	0.018	0.019
106	75	0.059	2.32	3.96	3.95	3.90	3.85	0.016	0.017	0.019	0.019
106	77	0.064	2.52	3.88	3.87	3.83	3.78	0.016	0.017	0.019	0.019
1067	69	0.058	2.28	4.14	4.10	4.06	4.02	0.015	0.016	0.017	0.018
1067	72	0.065	2.56	4.06	4.04	3.99	3.95	0.016	0.016	0.018	0.018
1067	75	0.072	2.83	3.96	3.95	3.90	3.85	0.016	0.017	0.019	0.019
1027	70	0.038	1.50	4.11	4.08	4.04	4.00	0.015	0.016	0.018	0.018
1027	72	0.040	1.57	4.06	4.04	3.99	3.95	0.016	0.016	0.018	0.018
1027	75	0.049	1.93	3.96	3.95	3.90	3.85	0.016	0.017	0.019	0.019
1037	68	0.042	1.65	4.17	4.13	4.09	4.05	0.015	0.016	0.017	0.018
1037	71	0.047	1.85	4.08	4.06	4.01	3.97	0.016	0.016	0.018	0.018
1037	73	0.051	2.01	4.04	4.02	3.97	3.92	0.016	0.017	0.018	0.019
1037	75	0.056	2.20	3.96	3.95	3.90	3.85	0.016	0.017	0.019	0.019
1037	77	0.061	2.40	3.88	3.87	3.83	3.78	0.016	0.017	0.019	0.019

### 3. REMARK

- 1) Test by SPDR method.
- 2) The data above show actual values and are not guaranteed, for your reference only.
- 3) Last update: February, 2025.