Based Material Line Up

S1170G/S1170GB

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
0.04	1.57	1*1037	66	4.24	4.21	4.18	4.16	0.0150	0.0170	0.0170	0.0180
0.05	1.97	1*1067	64	4.29	4.26	4.22	4.20	0.0150	0.0160	0.0170	0.0170
0.076	2.99	1*1080	64	4.29	4.26	4.22	4.20	0.0150	0.0160	0.0170	0.0170
0.089	3.50	1*1080	68	4.19	4.16	4.13	4.11	0.0150	0.0170	0.0170	0.0180
0.10	3.94	1*3313	56	4.48	4.45	4.42	4.40	0.014	0.015	0.015	0.015
0.10	3.94	2*106	70	4.14	4.11	4.07	4.07	0.016	0.017	0.018	0.018
0.127	5.00	1*2116	55	4.50	4.47	4.44	4.42	0.0140	0.0150	0.0150	0.0150
0.127	5.00	2*106	77	3.98	3.96	3.90	3.90	0.016	0.018	0.018	0.019
0.15	5.91	1*1506	44	4.76	4.72	4.70	4.68	0.0120	0.0130	0.0130	0.0130
0.15	5.91	2*1080	64	4.29	4.26	4.22	4.20	0.0150	0.0160	0.0170	0.0170
0.20	7.87	1*7628	45	4.74	4.70	4.68	4.66	0.0120	0.0130	0.0140	0.0130
0.20	7.87	2*3313	56	4.48	4.45	4.42	4.40	0.014	0.015	0.015	0.015
0.254	10.00	2*2116	55	4.50	4.47	4.44	4.42	0.0140	0.0150	0.0150	0.0150
0.30	11.81	2*1506	44	4.76	4.72	4.70	4.68	0.0120	0.0130	0.0130	0.0130
0.40	15.75	2*7628	44	4.76	4.72	4.70	4.68	0.0120	0.0130	0.0130	0.0130
0.41	16.14	2*7628	45	4.74	4.70	4.68	4.66	0.0120	0.0130	0.0140	0.0130
0.51	20.08	2*7628+2116	45	4.74	4.70	4.68	4.66	0.0120	0.0130	0.0140	0.0130
0.61	24.02	3*7628	45	4.74	4.70	4.68	4.66	0.0120	0.0130	0.0140	0.0130
0.71	27.95	4*7628	41	4.82	4.81	4.76	4.77	0.012	0.013	0.013	0.013

Based Material Line Up

0.81	31.89	4*7628	45	4.74	4.70	4.68	4.66	0.0120	0.0130	0.0140	0.0130
1.0	39.37	5*7628	44	4.76	4.72	4.70	4.68	0.0120	0.0130	0.0130	0.0130
1.2	47.24	6*7628	44	4.76	4.72	4.70	4.68	0.0120	0.0130	0.0130	0.0130
1.4	55.12	7*7628	44	4.76	4.72	4.70	4.68	0.0120	0.0130	0.0130	0.0130
1.6	62.99	9*7628	40	4.84	4.84	4.78	4.80	0.012	0.013	0.013	0.013

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
1037	71	0.048	1.89	4.12	4.09	4.05	4.04	0.0160	0.0170	0.0180	0.0180
1037	73	0.052	2.05	4.07	4.05	4.01	3.99	0.0160	0.0170	0.0180	0.0180
1037	75	0.057	2.24	4.02	4.00	3.96	3.94	0.0160	0.0180	0.0180	0.0190
106	72	0.053	2.09	4.10	4.07	4.03	4.01	0.0160	0.0170	0.0180	0.0180
106	76	0.064	2.52	4.00	3.98	3.93	3.92	0.0160	0.0180	0.0180	0.0190
1080	64	0.078	3.07	4.29	4.26	4.22	4.20	0.0150	0.0160	0.0170	0.0170
1080	68	0.090	3.54	4.19	4.16	4.13	4.11	0.0150	0.0170	0.0170	0.0180
2313	55	0.101	3.98	4.50	4.47	4.44	4.42	0.0140	0.0150	0.0150	0.0150
2313	59	0.114	4.49	4.40	4.37	4.34	4.32	0.0140	0.0150	0.0160	0.0160
2116	52	0.119	4.69	4.57	4.54	4.51	4.49	0.0130	0.0140	0.0150	0.0150
2116	55	0.130	5.12	4.50	4.47	4.44	4.42	0.0140	0.0150	0.0150	0.0150
2116	58	0.141	5.55	4.43	4.40	4.37	4.35	0.0140	0.0150	0.0160	0.0160
1506	45	0.159	6.26	4.74	4.70	4.68	4.66	0.0120	0.0130	0.0140	0.0130
1506	48	0.171	6.73	4.66	4.63	4.60	4.59	0.0130	0.0140	0.0140	0.0140

CN-LU-2009-S02-S1170G- S1170GB

Based Material Line Up

7628	43	0.193	7.60	4.78	4.75	4.72	4.71	0.0120	0.0130	0.0130	0.0130
7628	46	0.207	8.15	4.71	4.68	4.65	4.64	0.0130	0.0140	0.0140	0.0140
7628	48	0.218	8.58	4.66	4.63	4.60	4.59	0.0130	0.0140	0.0140	0.0140
7628	50	0.229	9.02	4.62	4.58	4.56	4.54	0.0130	0.0140	0.0140	0.0140

3. REMARK

1) Dk/Df test by SPDR method.
2) The data above show actual values and are not guaranteed, for your reference only.
3) Last update: September, 2020.

CN-LU-2009-S02-S1170G- S1170GB