

Based Material Line Up



Synamic9GN/ Synamic9GNB

1. CORE (C-STAGE)

Thickness		ply-up	RC (%)	Dk						Df					
mm	mil			1 GHz	14 GHz	26 GHz	38 GHz	50 GHz	62GHz	1 GHz	14 GHz	26 GHz	38 GHz	50 GHz	62GHz
0.051	2.00	1*1035	69	3.21	3.11	3.11	3.10	3.10	3.09	0.0005	0.0014	0.0016	0.0018	0.0020	0.0022
0.064	2.50	1*1035	74	3.11	3.01	3.01	3.00	3.00	2.99	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
0.076	3.00	1*1035	78	3.03	2.93	2.93	2.92	2.92	2.91	0.0004	0.0010	0.0012	0.0014	0.0016	0.0018
0.076	3.00	1*1078	66	3.25	3.15	3.15	3.14	3.14	3.13	0.0005	0.0014	0.0016	0.0018	0.0020	0.0022
0.076	3.00	2*1037	66	3.25	3.15	3.15	3.14	3.14	3.13	0.0005	0.0014	0.0016	0.0018	0.0020	0.0022
0.089	3.50	1*1078	71	3.17	3.07	3.07	3.06	3.06	3.05	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
0.089	3.50	2*1037	71	3.17	3.07	3.07	3.06	3.06	3.05	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
0.102	4.00	2*1035	69	3.21	3.11	3.11	3.10	3.10	3.09	0.0005	0.0014	0.0016	0.0018	0.0020	0.0022
0.102	4.00	1*1078	74	3.11	3.01	3.01	3.00	3.00	2.99	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
0.102	4.00	1*3313	59	3.35	3.25	3.25	3.24	3.24	3.23	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
0.114	4.50	2*1035	71	3.13	3.07	3.07	3.06	3.06	3.05	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
0.127	5.00	2*1035	74	3.11	3.01	3.01	3.00	3.00	2.99	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
0.127	5.00	2*1078	61	3.34	3.24	3.24	3.23	3.23	3.22	0.0005	0.0016	0.0018	0.0020	0.0022	0.0024
0.127	5.00	1*2116	57	3.38	3.28	3.28	3.27	3.27	3.26	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
0.140	5.50	2*1035	76	3.07	2.97	2.97	2.96	2.96	2.95	0.0005	0.0012	0.0014	0.0016	0.0018	0.0020
0.140	5.50	2*1078	63	3.30	3.20	3.20	3.19	3.19	3.18	0.0005	0.0016	0.0018	0.0020	0.0022	0.0024
0.152	6.00	2*1078	66	3.25	3.15	3.15	3.14	3.14	3.13	0.0005	0.0014	0.0016	0.0018	0.0020	0.0022
0.178	7.00	2*1078	71	3.17	3.07	3.07	3.06	3.06	3.05	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
0.203	8.00	4*1035	69	3.21	3.11	3.11	3.10	3.10	3.09	0.0005	0.0014	0.0016	0.0018	0.0020	0.0022
0.203	8.00	3*1035	76	3.07	2.97	2.97	2.96	2.96	2.95	0.0005	0.0012	0.0014	0.0016	0.0018	0.0020
0.203	8.00	2*1078	74	3.11	3.01	3.01	3.00	3.00	2.99	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
0.203	8.00	2*3313	59	3.35	3.25	3.25	3.24	3.24	3.23	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025

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0.254	10.00	2*2116	57	3.38	3.28	3.28	3.27	3.27	3.26	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
0.305	12.00	3*3313	59	3.35	3.25	3.25	3.24	3.24	3.23	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
0.381	15.00	3*2116	57	3.38	3.28	3.28	3.27	3.27	3.26	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
0.508	20.00	4*2116	57	3.38	3.28	3.28	3.27	3.27	3.26	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
0.635	25.00	5*2116	57	3.38	3.28	3.28	3.27	3.27	3.26	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
0.762	30.00	6*2116	57	3.38	3.28	3.28	3.27	3.27	3.26	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025

2. PREPREG (B-STAGE)

Glass style	Fiber Glass Weight(g/m2)	RC (%) Nominal	Thickness		Dk						Df					
			mm	mil	1GH	14 GHz	26 GHz	38 GHz	50 GHz	62GHz	1GH	14 GHz	26 GHz	38 GHz	50 GHz	62GHz
1035	27	69	0.051	2.0	3.21	3.11	3.11	3.10	3.10	3.09	0.0005	0.0014	0.0016	0.0018	0.0020	0.0022
1035	27	74	0.064	2.5	3.11	3.01	3.01	3.00	3.00	2.99	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
1035	27	76	0.069	2.7	3.07	2.97	2.97	2.96	2.96	2.95	0.0005	0.0012	0.0014	0.0016	0.0018	0.0020
1035	27	78	0.076	3.0	3.03	2.93	2.93	2.92	2.92	2.91	0.0004	0.0010	0.0012	0.0014	0.0016	0.0018
1035	27	79	0.084	3.3	3.00	2.90	2.90	2.89	2.89	2.88	0.0004	0.0010	0.0012	0.0014	0.0016	0.0018
1078	43	66	0.076	3.0	3.25	3.15	3.15	3.14	3.14	3.13	0.0005	0.0014	0.0016	0.0018	0.0020	0.0022
1078	43	71	0.089	3.5	3.17	3.07	3.07	3.06	3.06	3.05	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
1078	43	74	0.102	4.0	3.11	3.01	3.01	3.00	3.00	2.99	0.0005	0.0013	0.0015	0.0017	0.0019	0.0021
1078	43	75	0.107	4.2	3.09	2.99	2.99	2.98	2.98	2.95	0.0005	0.0012	0.0014	0.0016	0.0018	0.0020
3313	72	59	0.102	4.0	3.35	3.25	3.25	3.24	3.24	3.23	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
3313	72	63	0.114	4.5	3.31	3.21	3.21	3.20	3.20	3.19	0.0005	0.0016	0.0018	0.0020	0.0022	0.0024
2116	94	57	0.127	5.0	3.38	3.28	3.28	3.27	3.27	3.26	0.0005	0.0017	0.0019	0.0021	0.0023	0.0025
2116	94	60	0.140	5.5	3.34	3.24	3.24	3.23	3.23	3.22	0.0005	0.0016	0.0018	0.0020	0.0022	0.0024

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3. REMARK

- 1) Dk/Df test method(1GHz): IPC-TM-650 2.5.5.9 parallel plate.
- 2) Dk/Df test method(14~62GHz): Balance-type Circular-disk Resonator (BCDR).
- 3) Copper foil: HVLP3 18/35 μ m, HVLP4 18/35 μ m, RTF 70 μ m.
- 4) The above PP thickness data is for reference only, and PCB need to evaluate the corresponding data according to pressing profile and actual pressing condition.
- 5) All the values listed above are for your reference only. Please contact Shengyi Technology Co., Ltd. for detailed information.
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- 6) Updated date: December, 2024