

Base Material Line Up



1. Thin Core (Synamic8GN)

Typical Thickness		Ply-up	RC (%)	Typical Dk						Typical Df					
mil	mm			1 GHz	5GHz	10 GHz	15GHz	20 GHz	30 GHz	1 GHz	5GHz	10 GHz	15GHz	20GHz	30GHz
2.0	0.051	1x1035	70	2.84	2.84	2.84	2.84	2.84	2.84	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
2.3	0.058	1x1035	73	2.82	2.82	2.82	2.82	2.82	2.82	0.0009	0.0015	0.0018	0.0020	0.0022	0.0026
2.5	0.064	1x1035	75	2.80	2.79	2.79	2.79	2.79	2.79	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
3.0	0.076	1x1078	68	2.87	2.87	2.87	2.87	2.87	2.87	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
3.0	0.076	2x1037	69	2.86	2.85	2.85	2.85	2.85	2.85	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
3.0	0.076	1x1035	79	2.73	2.73	2.73	2.73	2.73	2.73	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
3.5	0.089	1x1078	71	2.83	2.83	2.83	2.83	2.83	2.83	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
3.5	0.089	2x1037	72	2.81	2.80	2.80	2.80	2.80	2.80	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
4.0	0.102	2x1035	70	2.84	2.84	2.84	2.84	2.84	2.84	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
4.0	0.102	1x1078	75	2.80	2.79	2.79	2.79	2.79	2.79	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
4.0	0.102	1x3313	60	2.94	2.93	2.93	2.93	2.93	2.93	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
4.5	0.114	1x3313	64	2.90	2.90	2.90	2.90	2.90	2.90	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
4.5	0.114	2x1035	73	2.82	2.82	2.82	2.82	2.82	2.82	0.0009	0.0015	0.0018	0.0020	0.0022	0.0026
5.0	0.127	1x2116	58	2.95	2.95	2.95	2.95	2.95	2.95	0.0011	0.0017	0.0019	0.0021	0.0023	0.0027
5.0	0.127	2x1035	75	2.80	2.79	2.79	2.79	2.79	2.79	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
5.0	0.127	2x1078	62	2.92	2.92	2.92	2.92	2.92	2.91	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
5.5	0.140	2x1078	65	2.89	2.89	2.89	2.89	2.89	2.88	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
6.0	0.152	2x1078	68	2.87	2.87	2.87	2.87	2.87	2.87	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
7.0	0.178	2x1078	71	2.83	2.83	2.83	2.83	2.83	2.83	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
8.0	0.203	2x3313	60	2.94	2.93	2.93	2.93	2.93	2.93	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026

Base Material Line Up



10.0	0.254	2x2116	58	2.95	2.95	2.95	2.95	2.95	2.95	0.0011	0.0017	0.0019	0.0021	0.0023	0.0027
12.0	0.305	3x3313	60	2.94	2.93	2.93	2.93	2.93	2.93	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
15.0	0.381	3x2116	58	2.95	2.95	2.95	2.95	2.95	2.95	0.0011	0.0017	0.0019	0.0021	0.0023	0.0027
20.0	0.508	4x2116	58	2.95	2.95	2.95	2.95	2.95	2.95	0.0011	0.0017	0.0019	0.0021	0.0023	0.0027
25.0	0.635	5x2116	58	2.95	2.95	2.95	2.95	2.95	2.95	0.0011	0.0017	0.0019	0.0021	0.0023	0.0027
30.0	0.762	6x2116	58	2.95	2.95	2.95	2.95	2.95	2.95	0.0011	0.0017	0.0019	0.0021	0.0023	0.0027

2. Prepreg (Synamic8GNB)

Glass style	RC	Thickness		Typical Dk						Typical Df					
	(%)	mil	mm	1 GHz	5GHz	10 GHz	15GHz	20GHz	30GHz	1 GHz	5GHz	10 GHz	15GHz	20GHz	30GHz
1027	76	1.8	0.046	2.78	2.78	2.78	2.78	2.78	2.78	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
1037	72	1.8	0.046	2.83	2.82	2.82	2.82	2.82	2.82	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
	74	2.0	0.050	2.81	2.81	2.81	2.81	2.81	2.81	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
1035	70	2.1	0.054	2.84	2.84	2.84	2.84	2.84	2.84	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
	73	2.4	0.061	2.82	2.82	2.82	2.82	2.82	2.82	0.0009	0.0015	0.0018	0.0020	0.0022	0.0026
	75	2.7	0.067	2.80	2.79	2.79	2.79	2.79	2.79	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
	77	2.8	0.072	2.76	2.76	2.76	2.76	2.76	2.76	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
	78	3.0	0.076	2.76	2.76	2.75	2.75	2.75	2.75	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
	80	3.4	0.086	2.74	2.74	2.74	2.74	2.74	2.74	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
1078	68	3.1	0.079	2.87	2.87	2.87	2.87	2.87	2.87	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
	69	3.3	0.084	2.86	2.85	2.85	2.85	2.85	2.85	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
	71	3.6	0.091	2.83	2.83	2.83	2.83	2.83	2.83	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
	73	3.8	0.097	2.82	2.82	2.82	2.82	2.82	2.82	0.0009	0.0015	0.0018	0.0020	0.0022	0.0026
	75	4.1	0.105	2.80	2.79	2.79	2.79	2.79	2.79	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025
	77	4.4	0.112	2.76	2.76	2.76	2.76	2.76	2.76	0.0009	0.0015	0.0017	0.0019	0.0021	0.0025

Base Material Line Up



3313	60	4.1	0.105	2.94	2.93	2.93	2.93	2.93	2.93	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
	62	4.3	0.110	2.92	2.92	2.92	2.92	2.92	2.91	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
	64	4.6	0.117	2.90	2.90	2.90	2.90	2.90	2.90	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
2116	58	5.1	0.130	2.95	2.95	2.95	2.95	2.95	2.95	0.0011	0.0017	0.0019	0.0021	0.0023	0.0027
	60	5.3	0.135	2.94	2.93	2.93	2.93	2.93	2.93	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026
	62	5.6	0.143	2.92	2.92	2.92	2.92	2.92	2.91	0.0010	0.0016	0.0018	0.0020	0.0022	0.0026

Remark:

1. For customer impedance calculation and SI simulation use only.
2. Not used for PCB's IQC test reference. QA Dk/Df consistency monitoring method use SPDR. Please check with SYTECH technical service engineers.
3. The above data is for reference only. SYTECH reserves the right for any update.
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.