

# Based Material Line Up



## Autolad3G/ Autolad3GB

### 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
0.051	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	1X1086	62	3.93	3.91	3.89	3.84	0.012	0.013	0.013	0.014
0.089	3.50	1X3313	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.102	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
0.102	4.00	2X1067	67	3.83	3.81	3.79	3.74	0.012	0.013	0.014	0.014
0.114	4.50	1X2116	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.127	5.00	1X2116	57	4.03	4.01	3.99	3.94	0.011	0.012	0.012	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
0.152	6.00	2X1078	65	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014
0.178	7.00	1X7628	42	4.36	4.34	4.32	4.30	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
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

# Based Material Line Up



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	42	4.36	4.34	4.32	4.30	0.009	0.011	0.011	0.011
0.381	15.00	3X2116	57	4.03	4.01	3.99	3.94	0.011	0.012	0.012	0.013
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
0.610	24.00	3X7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
0.610	24.00	6X2116	48	4.22	4.21	4.18	4.16	0.010	0.011	0.011	0.012
0.635	25.00	6X2116	50	4.20	4.19	4.16	4.14	0.010	0.011	0.011	0.012
0.711	28.00	4X7628	42	4.36	4.34	4.32	4.30	0.009	0.011	0.011	0.011
0.711	28.00	6X2116	54	4.10	4.06	4.03	3.99	0.010	0.012	0.012	0.013
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
0.813	32.00	8X2116	48	4.22	4.21	4.18	4.16	0.010	0.011	0.011	0.012
0.914	36.00	9X2116	48	4.22	4.21	4.18	4.16	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
1.016	40.00	10X2116	48	4.22	4.21	4.18	4.16	0.010	0.011	0.011	0.012

## 2. Prepreg (B-Stage)

# Based Material Line Up



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
106	74	0.051	2.00	3.70	3.68	3.67	3.62	0.012	0.014	0.014	0.015
1067	67	0.051	2.00	3.83	3.81	3.79	3.74	0.012	0.013	0.014	0.014
	71	0.058	2.30	3.75	3.73	3.72	3.67	0.012	0.014	0.014	0.014
1080/1078	65	0.076	3.00	3.87	3.85	3.83	3.78	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
3313	53	0.089	3.50	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
	58	0.102	4.00	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
2116	52	0.109	4.30	4.14	4.11	4.07	4.03	0.010	0.012	0.012	0.013
	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
	58	0.130	5.10	4.01	3.99	3.97	3.92	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) Latest update: January, 2023