

# 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	1×106	73	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
0.051	2.00	1×1067	67	3.83	3.81	3.79	3.74	0.012	0.013	0.014	0.014
0.058	2.30	1×1067	71	3.75	3.73	3.72	3.67	0.012	0.014	0.014	0.014
0.064	2.50	1×1067	73	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
0.064	2.50	1×1078	61	3.95	3.93	3.91	3.86	0.011	0.013	0.013	0.013
0.076	3.00	1×1080	65	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014
0.076	3.00	1×1078	65	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014
0.076	3.00	1×1086	62	3.93	3.91	3.89	3.84	0.012	0.013	0.013	0.014
0.089	3.50	1×3313	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.102	4.00	1×3313	58	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
0.102	4.00	2×106	73	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
0.114	4.50	1×2116	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.127	5.00	1×2116	57	4.03	4.01	3.99	3.94	0.011	0.012	0.012	0.013
0.152	6.00	1×1506	46	4.26	4.26	4.22	4.20	0.009	0.011	0.011	0.012
0.152	6.00	2×1080	65	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014
0.178	7.00	1×7628	42	4.36	4.34	4.32	4.30	0.009	0.011	0.011	0.011
0.178	7.00	2×3313	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.203	8.00	1×7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
0.203	8.00	2×3313	58	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
0.229	9.00	2×2116	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
0.254	10.00	2×2116	57	4.03	4.01	3.99	3.94	0.011	0.012	0.012	0.013
0.305	12.00	2×1506	46	4.26	4.26	4.22	4.20	0.009	0.011	0.011	0.012
0.305	12.00	3×3313	58	4.01	3.99	3.97	3.92	0.011	0.012	0.012	0.013
0.356	14.00	2×7628	42	4.36	4.34	4.32	4.30	0.009	0.011	0.011	0.011
0.381	15.00	3×2116	57	4.03	4.01	3.99	3.94	0.011	0.012	0.012	0.013
0.406	16.00	2×7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
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	4×2116	53	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013

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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
0.635	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
1.000	39.40	5x7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
1.200	47.20	6x7628	47	4.24	4.23	4.20	4.18	0.010	0.011	0.011	0.012
1.500	59.00	8x7628	44	4.31	4.30	4.28	4.25	0.009	0.011	0.011	0.012

## 2. PREPREG (B-STAGE)

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
1027	73	0.041	1.60	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
	75	0.046	1.80	3.68	3.67	3.65	3.61	0.012	0.014	0.015	0.015
	77	0.051	2.00	3.64	3.62	3.61	3.56	0.012	0.014	0.015	0.015
	79	0.056	2.20	3.60	3.58	3.57	3.52	0.012	0.015	0.015	0.016
1037	73	0.048	1.90	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
	75	0.053	2.10	3.68	3.67	3.65	3.61	0.012	0.014	0.015	0.015
	77	0.058	2.30	3.64	3.62	3.61	3.56	0.012	0.014	0.015	0.015
	79	0.064	2.50	3.60	3.58	3.57	3.52	0.012	0.015	0.015	0.016
106	73	0.051	2.00	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
	75	0.056	2.20	3.68	3.67	3.65	3.61	0.012	0.014	0.015	0.015
	77	0.061	2.40	3.64	3.62	3.61	3.56	0.012	0.014	0.015	0.015
	79	0.069	2.70	3.60	3.58	3.57	3.52	0.012	0.015	0.015	0.016
1067	70	0.056	2.20	3.78	3.77	3.75	3.70	0.012	0.014	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
	73	0.064	2.50	3.72	3.70	3.69	3.64	0.012	0.014	0.014	0.015
	75	0.071	2.80	3.68	3.67	3.65	3.61	0.012	0.014	0.015	0.015
	77	0.076	3.00	3.64	3.62	3.61	3.56	0.012	0.014	0.015	0.015
1080/1078	65	0.076	3.00	3.87	3.85	3.83	3.78	0.012	0.013	0.014	0.014

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	67	0.081	3.20	3.83	3.81	3.79	3.74	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
	72	0.097	3.80	3.73	3.71	3.70	3.66	0.012	0.014	0.014	0.015
	75	0.109	4.30	3.68	3.67	3.65	3.61	0.012	0.014	0.015	0.015
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
	61	0.114	4.50	3.95	3.93	3.91	3.86	0.011	0.013	0.013	0.013
2116	53	0.114	4.50	4.12	4.08	4.04	4.00	0.010	0.012	0.012	0.013
	55	0.122	4.80	4.08	4.05	4.02	3.97	0.011	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
	63	0.152	6.00	3.91	3.89	3.87	3.82	0.012	0.013	0.013	0.014
1506	48	0.160	6.30	4.22	4.21	4.18	4.16	0.010	0.011	0.011	0.012
	50	0.170	6.70	4.20	4.19	4.16	4.14	0.010	0.011	0.011	0.012
7628	46	0.196	7.70	4.26	4.26	4.22	4.20	0.009	0.011	0.011	0.012
	48	0.203	8.00	4.22	4.21	4.18	4.16	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
	52	0.226	8.90	4.14	4.11	4.07	4.03	0.010	0.012	0.012	0.013

### 3. REMARK

- 1) Dk/Df test method(1GHz~10GHz):IPC-TM-650 2.5.5.5 Stripline.
- 2) Copper foil: HTE, 35μm.
- 3) The above data are intended for reference only. SYTECH reserves the right to make any update.