

Base Material Line Up



SDI06K/SDI06KB

1. CORE (C-STAGE)

Thickness		ply-up	RC (%)	Dk					Df				
mm	mil			1 GHz	3 GHz	5 GHz	10 GHz	15 GHz	1 GHz	3 GHz	5 GHz	10 GHz	15 GHz
0.030	1.2	1×1027	62	3.81	3.80	3.75	3.69	3.65	0.0058	0.0060	0.0063	0.0073	0.0083
0.040	1.6	1×1027	72	3.61	3.59	3.55	3.49	3.45	0.0060	0.0061	0.0066	0.0076	0.0085
0.040	1.6	1×1037	68	3.68	3.67	3.62	3.57	3.53	0.0059	0.0061	0.0065	0.0075	0.0084
0.050	2.0	1×1037	73	3.59	3.57	3.53	3.47	3.43	0.0061	0.0063	0.0066	0.0076	0.0085
0.050	2.0	1×1067	66	3.72	3.71	3.67	3.61	3.57	0.0059	0.0061	0.0065	0.0074	0.0083
0.058	2.3	1×1078	57	3.91	3.9	3.85	3.79	3.76	0.0057	0.0057	0.0062	0.0072	0.0083
0.060	2.4	1×1078	58	3.89	3.88	3.83	3.77	3.74	0.0057	0.0058	0.0062	0.0072	0.0083
0.064	2.5	1×1078	60	3.85	3.84	3.79	3.73	3.68	0.0058	0.0059	0.0063	0.0073	0.0083
0.075	3.0	1×1086	62	3.81	3.80	3.75	3.69	3.65	0.0058	0.0059	0.0063	0.0073	0.0083
0.090	3.5	1×1086	68	3.68	3.67	3.62	3.57	3.53	0.0059	0.0061	0.0065	0.0075	0.0084
0.090	3.5	1×3313	53	4.00	3.98	3.93	3.87	3.84	0.0056	0.0057	0.0061	0.0071	0.0082
0.100	4.0	1×2116	47	4.12	4.11	4.05	3.99	3.97	0.0054	0.0055	0.0060	0.0070	0.0081
0.100	4.0	1×3313	57	3.91	3.90	3.85	3.79	3.76	0.0057	0.0058	0.0062	0.0072	0.0083
0.127	5.0	1×2116	56	3.93	3.92	3.87	3.81	3.78	0.0056	0.0058	0.0062	0.0072	0.0083
0.127	5.0	2×1078	60	3.85	3.84	3.79	3.73	3.68	0.0058	0.0059	0.0063	0.0073	0.0083
0.152	6.0	1×1506	45	4.17	4.15	4.10	4.03	4.02	0.0054	0.0055	0.0060	0.0069	0.0080
0.152	6.0	2×1086	62	3.81	3.80	3.75	3.69	3.65	0.0058	0.0059	0.0063	0.0073	0.0083
0.203	8.0	1×7628	47	4.12	4.11	4.05	3.99	3.97	0.0054	0.0055	0.0060	0.0070	0.0081
0.203	8.0	2×2116	47	4.12	4.11	4.05	3.99	3.97	0.0054	0.0055	0.0060	0.0070	0.0081

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0.254	10.0	2×2116	56	3.93	3.92	3.87	3.81	3.78	0.0056	0.0058	0.0062	0.0072	0.0083
0.305	12.0	2×1506	45	4.17	4.15	4.10	4.03	4.02	0.0054	0.0055	0.0060	0.0069	0.0080
0.305	12.0	3×2116	47	4.12	4.11	4.05	3.99	3.97	0.0054	0.0055	0.0060	0.0070	0.0081
0.406	16.0	2×7628	47	4.12	4.11	4.05	3.99	3.97	0.0054	0.0055	0.0060	0.0070	0.0081
0.508	20.0	7628+2116+7628	47	4.12	4.11	4.05	3.99	3.97	0.0054	0.0055	0.0060	0.0070	0.0081
0.610	24.0	3×7628	47	4.12	4.11	4.05	3.99	3.97	0.0054	0.0055	0.0060	0.0070	0.0081
0.810	32.0	4×7628	47	4.12	4.11	4.05	3.99	3.97	0.0054	0.0055	0.0060	0.0070	0.0081

2. PREPREG (B-STAGE)

Glass style	RC (%)	Thickness		Dk					Df				
		mm	mil	1GHz	3GHz	5GHz	10GHz	15GHz	1 GHz	3 GHz	5 GHz	10GHz	15 GHz
1010	77	0.024	0.94	3.50	3.49	3.45	3.41	3.35	0.0061	0.0063	0.0066	0.0076	0.0085
	79	0.027	1.06	3.48	3.46	3.43	3.37	3.32	0.0061	0.0063	0.0066	0.0077	0.0085
	81	0.030	1.18	3.46	3.44	3.41	3.35	3.30	0.0061	0.0063	0.0067	0.0078	0.0086
1017	74	0.026	1.02	3.57	3.55	3.51	3.45	3.41	0.0061	0.0061	0.0066	0.0076	0.0085
	77	0.030	1.18	3.50	3.49	3.45	3.41	3.35	0.0061	0.0063	0.0066	0.0076	0.0085
	79	0.033	1.30	3.48	3.46	3.43	3.37	3.32	0.0061	0.0063	0.0066	0.0077	0.0085
1027	69	0.035	1.38	3.66	3.65	3.60	3.55	3.51	0.0059	0.0061	0.0065	0.0075	0.0084
	71	0.038	1.50	3.63	3.61	3.57	3.51	3.47	0.0060	0.0062	0.0066	0.0076	0.0084
	73	0.041	1.61	3.59	3.57	3.53	3.47	3.43	0.0061	0.0063	0.0066	0.0076	0.0085
	75	0.045	1.77	3.55	3.53	3.49	3.43	3.39	0.0061	0.0063	0.0066	0.0076	0.0085
	77	0.050	1.97	3.50	3.49	3.45	3.41	3.35	0.0061	0.0063	0.0066	0.0076	0.0085
1037	71	0.044	1.73	3.63	3.61	3.57	3.51	3.47	0.0060	0.0062	0.0066	0.0076	0.0084
	73	0.048	1.89	3.59	3.57	3.53	3.47	3.43	0.0061	0.0063	0.0066	0.0076	0.0085
	75	0.053	2.09	3.55	3.53	3.49	3.43	3.39	0.0061	0.0063	0.0066	0.0076	0.0085

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106	73	0.051	2.01	3.59	3.57	3.53	3.47	3.43	0.0061	0.0063	0.0066	0.0076	0.0085
	75	0.058	2.28	3.55	3.53	3.49	3.43	3.39	0.0061	0.0063	0.0066	0.0076	0.0085
	77	0.064	2.52	3.50	3.49	3.45	3.41	3.35	0.0061	0.0063	0.0066	0.0076	0.0085
1067	69	0.056	2.20	3.66	3.65	3.60	3.55	3.51	0.0059	0.0061	0.0065	0.0075	0.0084
	71	0.060	2.36	3.63	3.61	3.57	3.51	3.47	0.0060	0.0062	0.0066	0.0076	0.0084
	73	0.065	2.56	3.59	3.57	3.53	3.47	3.43	0.0061	0.0063	0.0066	0.0076	0.0085
	75	0.070	2.76	3.55	3.53	3.49	3.43	3.39	0.0061	0.0063	0.0066	0.0076	0.0085
1078	63	0.069	2.72	3.79	3.78	3.73	3.67	3.63	0.0058	0.0060	0.0064	0.0073	0.0083
	65	0.074	2.91	3.74	3.73	3.69	3.63	3.59	0.0058	0.0060	0.0064	0.0074	0.0083
	67	0.079	3.11	3.70	3.69	3.65	3.59	3.55	0.0059	0.0061	0.0065	0.0075	0.0084
	69	0.084	3.31	3.66	3.65	3.60	3.55	3.51	0.0059	0.0061	0.0065	0.0075	0.0084
1080	64	0.074	2.91	3.76	3.75	3.71	3.65	3.61	0.0058	0.0060	0.0064	0.0073	0.0083
	66	0.079	3.11	3.72	3.71	3.67	3.61	3.57	0.0059	0.0061	0.0065	0.0074	0.0083
	68	0.084	3.31	3.68	3.67	3.62	3.57	3.53	0.0059	0.0061	0.0065	0.0075	0.0084
1086	63	0.079	3.11	3.79	3.78	3.73	3.67	3.63	0.0058	0.0060	0.0064	0.0073	0.0083
	65	0.083	3.27	3.74	3.73	3.69	3.63	3.59	0.0058	0.0060	0.0064	0.0074	0.0083
	67	0.090	3.54	3.70	3.69	3.65	3.59	3.55	0.0059	0.0061	0.0065	0.0075	0.0084
3313	57	0.100	3.94	3.91	3.9	3.85	3.79	3.76	0.0057	0.0058	0.0062	0.0072	0.0083
	59	0.107	4.21	3.87	3.86	3.81	3.75	3.71	0.0058	0.0059	0.0062	0.0073	0.0083
2116	54	0.120	4.72	3.97	3.96	3.91	3.85	3.83	0.0056	0.0057	0.0061	0.0071	0.0082
	56	0.125	4.92	3.93	3.92	3.87	3.81	3.78	0.0056	0.0058	0.0062	0.0072	0.0083
	58	0.135	5.31	3.89	3.88	3.83	3.77	3.74	0.0058	0.0059	0.0062	0.0072	0.0083
1506	50	0.170	6.69	4.07	4.04	3.99	3.93	3.90	0.0055	0.0056	0.0060	0.0070	0.0081
	52	0.180	7.09	4.02	4.00	3.95	3.89	3.86	0.0055	0.0056	0.0060	0.0071	0.0082

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3. REMARK

- 1) Dk/Df : IPC TM-650 2.5.5.5
- 2) All the values listed above are for your reference only. Please contact Shengyi Technology Co., Ltd. for detailed information. All rights from this line up are reserved by Shengyi Technology Co., Ltd.;
- 3) Updated date: May, 2023