

Base Material Lineup



S7439GS Lineup

1.Thin Core (S7439GS)

Thickness		Ply-up	RC (%)	Dk					Df				
mil	mm			1 GHz	3 GHz	5 GHz	10 GHz	15 GHz	1GHz	3 GHz	5 GHz	10 GHz	15 GHz
2.0	0.051	1x106	75	3.45	3.44	3.44	3.44	3.44	0.0052	0.0055	0.0059	0.0063	0.0065
2.0	0.051	1x1067	69	3.58	3.57	3.57	3.57	3.57	0.0050	0.0053	0.0057	0.0061	0.0063
2.5	0.064	1x106	79	3.37	3.36	3.36	3.36	3.36	0.0053	0.0056	0.0060	0.0064	0.0066
2.5	0.064	1x1067	75	3.45	3.44	3.44	3.44	3.44	0.0052	0.0055	0.0059	0.0063	0.0065
3.0	0.076	1x1080	68	3.60	3.59	3.59	3.59	3.59	0.0049	0.0052	0.0056	0.0060	0.0062
3.0	0.076	1x1078	68	3.60	3.59	3.59	3.59	3.59	0.0049	0.0052	0.0056	0.0060	0.0062
3.0	0.076	2x1037	70	3.56	3.55	3.55	3.55	3.55	0.0050	0.0053	0.0057	0.0061	0.0063
3.5	0.089	1x3313	56	3.84	3.83	3.83	3.83	3.83	0.0046	0.0049	0.0053	0.0057	0.0059
3.5	0.089	2x1037	73	3.49	3.48	3.48	3.48	3.48	0.0051	0.0054	0.0058	0.0062	0.0064
4.0	0.102	1x3313	60	3.76	3.75	3.75	3.75	3.75	0.0047	0.0050	0.0054	0.0058	0.0060
4.0	0.102	2x1067	69	3.58	3.57	3.57	3.57	3.57	0.0050	0.0053	0.0057	0.0061	0.0063
4.0	0.102	2x106	75	3.45	3.44	3.44	3.44	3.44	0.0052	0.0055	0.0059	0.0063	0.0065
4.5	0.114	1x2116	55	3.86	3.85	3.85	3.85	3.85	0.0046	0.0049	0.0053	0.0057	0.0059
4.5	0.114	2X1067	73	3.49	3.48	3.48	3.48	3.48	0.0051	0.0054	0.0058	0.0062	0.0064
5.0	0.127	1x2116	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
5.0	0.127	2x1078	62	3.72	3.71	3.71	3.71	3.71	0.0048	0.0051	0.0055	0.0059	0.0061
5.0	0.127	2x1067	75	3.45	3.44	3.44	3.44	3.44	0.0052	0.0055	0.0059	0.0063	0.0065
5.0	0.127	2x106	79	3.37	3.36	3.36	3.36	3.36	0.0053	0.0056	0.0060	0.0064	0.0066
5.5	0.140	2x1078	65	3.72	3.71	3.71	3.71	3.71	0.0048	0.0051	0.0055	0.0059	0.0061

Base Material Lineup



6.0	0.152	2x1080	68	3.60	3.59	3.59	3.59	3.59	0.0049	0.0052	0.0056	0.0060	0.0062
6.0	0.152	2x1078	68	3.60	3.59	3.59	3.59	3.59	0.0049	0.0052	0.0056	0.0060	0.0062
7.0	0.178	2x3313	56	3.84	3.83	3.83	3.83	3.83	0.0046	0.0049	0.0053	0.0057	0.0059
8.0	0.203	2x3313	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
9.0	0.229	2x2116	55	3.86	3.85	3.85	3.85	3.85	0.0046	0.0049	0.0053	0.0057	0.0059
10.0	0.254	2x2116	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
12.0	0.305	3x3313	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
15.0	0.381	3x2116	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
16.0	0.406	4x3313	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
18.0	0.457	4x2116	55	3.86	3.85	3.85	3.85	3.85	0.0046	0.0049	0.0053	0.0057	0.0059
20.0	0.508	4x2116	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
25.0	0.635	5x2116	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
30.0	0.762	6x2116	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
35.0	0.889	7x2116	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
40.0	1.016	8x2116	59	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060

2.Prepreg (S7439GSB)

Glass Type (E-glass)	RC (%)	Thickness		Dk					Df				
		mil	mm	1GHz	3GHz	5 GHz	10 GHz	15 GHz	1GHz	3GHz	5 GHz	10 GHz	15 GHz
106	75	2.0	0.051	3.45	3.44	3.44	3.44	3.44	0.0052	0.0055	0.0059	0.0063	0.0065
106	77	2.3	0.058	3.41	3.40	3.40	3.40	3.40	0.0052	0.0055	0.0059	0.0063	0.0065
106	79	2.5	0.064	3.37	3.36	3.36	3.36	3.36	0.0053	0.0056	0.0060	0.0064	0.0066
1067	73	2.3	0.058	3.49	3.48	3.48	3.48	3.48	0.0051	0.0054	0.0058	0.0062	0.0064
1067	75	2.5	0.064	3.45	3.44	3.44	3.44	3.44	0.0052	0.0055	0.0059	0.0063	0.0065
1067	79	2.8	0.071	3.37	3.36	3.36	3.36	3.36	0.0053	0.0056	0.0060	0.0064	0.0066

Base Material Lineup



1078	68	3.0	0.076	3.60	3.59	3.59	3.59	3.59	0.0049	0.0052	0.0056	0.0060	0.0062
1078	70	3.2	0.081	3.56	3.55	3.55	3.55	3.55	0.0050	0.0053	0.0057	0.0061	0.0063
1078	73	3.6	0.091	3.49	3.48	3.48	3.48	3.48	0.0051	0.0054	0.0058	0.0062	0.0064
1080	68	3.0	0.076	3.60	3.59	3.59	3.59	3.59	0.0049	0.0052	0.0056	0.0060	0.0062
1080	70	3.2	0.081	3.56	3.55	3.55	3.55	3.55	0.0050	0.0053	0.0057	0.0061	0.0063
1080	73	3.6	0.091	3.49	3.48	3.48	3.48	3.48	0.0051	0.0054	0.0058	0.0062	0.0064
1080	75	4.0	0.102	3.45	3.44	3.44	3.44	3.44	0.0052	0.0055	0.0059	0.0063	0.0065
3313	60	4.0	0.102	3.76	3.75	3.75	3.75	3.75	0.0047	0.0050	0.0054	0.0058	0.0060
3313	62	4.2	0.107	3.72	3.71	3.71	3.71	3.71	0.0048	0.0051	0.0055	0.0059	0.0061
3313	64	4.5	0.114	3.68	3.67	3.67	3.67	3.67	0.0048	0.0051	0.0055	0.0059	0.0061
2116	59	5.0	0.127	3.78	3.77	3.77	3.77	3.77	0.0047	0.0050	0.0054	0.0058	0.0060
2116	61	5.4	0.137	3.74	3.73	3.73	3.73	3.73	0.0047	0.0050	0.0054	0.0058	0.0060

Remarks:

- 1) Dk/Df measuring method: IPC TM-650 2.5.5.5;
- 2) Copper Foil: HOZ, 1OZ with RTF/RTF2/RTF3, 2OZ with RTF. Other types of copper foil can be option upon request.
- 3) The above data is for reference only, but not guarantee value. SYTECH reserves the right for any update.