



N4000-29 – Dielectric Properties Table

LAMINATE

Thickness	&	Tol.	Construction				RC%	Thickness	2GHz Dk			2 GHz Df	10 GHz Dk			10 GHz Df	
0.0020	±	0.0005	1	106			71%	0.0021	3.70	±	0.106	0.0202	3.62	±	0.109	0.0216	
0.0025	±	0.0005	1	1080			59%	0.0027	3.99	±	0.124	0.0186	3.91	±	0.128	0.0199	
0.0030	±	0.0005	1	1080			64%	0.0031	3.86	±	0.105	0.0193	3.79	±	0.108	0.0206	
0.0040	±	0.0005	1	2116			46%	0.0041	4.39	±	0.155	0.0164	4.33	±	0.159	0.0176	
0.0045	±	0.0005	1	2116			51%	0.0046	4.23	±	0.114	0.0172	4.16	±	0.117	0.0185	
0.0050	±	0.0007	1	2116			55%	0.0051	4.11	±	0.122	0.0179	4.04	±	0.126	0.0192	
0.0060	±	0.0007	2	1080			64%	0.0063	3.86	±	0.077	0.0193	3.79	±	0.079	0.0206	
0.0065	±	0.0007	2	2113			49%	0.0067	4.28	±	0.108	0.0170	4.22	±	0.111	0.0182	
0.0070	±	0.001	2	2113			52%	0.0073	4.19	±	0.123	0.0175	4.12	±	0.126	0.0188	
0.0075	±	0.001	1	7628			44%	0.0076	4.47	±	0.188	0.0159	4.40	±	0.193	0.0172	
0.0080	±	0.001	2	2116			46%	0.0081	4.39	±	0.155	0.0164	4.33	±	0.159	0.0176	
0.0080	±	0.001	1	2116	+	1	2113	51%	0.0082	4.21	±	0.115	0.0174	4.14	±	0.118	0.0186
0.0090	±	0.001	1	2116	+	1	2116	50%	0.0092	4.23	±	0.116	0.0172	4.17	±	0.119	0.0185
0.0100	±	0.001	2	2116			55%	0.0103	4.11	±	0.090	0.0179	4.04	±	0.092	0.0192	
0.0120	±	0.0015	2	1080	+	1	7628	52%	0.0121	4.20	±	0.019	0.0174	4.13	±	0.019	0.0187
0.0140	±	0.0015	2	2113	+	1	7628	48%	0.0140	4.31	±	0.058	0.0168	4.24	±	0.059	0.0181
0.0140	±	0.0015	1	7628	+	1	7628	41%	0.0143	4.56	±	0.149	0.0154	4.50	±	0.153	0.0166
0.0150	±	0.0015	2	7628	+	1	106	43%	0.0150	4.48	±	0.072	0.0159	4.41	±	0.074	0.0171

The following laminate and prepreg items are a representative of available materials. These items and their associated values may not be regularly available and additional lead times or minimum order quantities could apply. Please contact our office or your local technical representative for assistance with choosing the best material for your design and application.

For More Information:

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0.0150	±	0.0015	2	2113	+	1	7628	50%	0.0152	4.25	±	0.073	0.0171	4.18	±	0.075	0.0184
0.0160	±	0.0015	2	7628	+	1	106	47%	0.0167	4.34	±	0.019	0.0166	4.27	±	0.019	0.0179
0.0180	±	0.0015	2	1080	+	2	7628	48%	0.0188	4.31	±	0.065	0.0168	4.24	±	0.067	0.0180
0.0200	±	0.002	3	7628				38%	0.0202	4.67	±	0.173	0.0149	4.61	±	0.177	0.0160
0.0200	±	0.002	2	2113	+	2	7628	44%	0.0202	4.45	±	0.069	0.0161	4.38	±	0.071	0.0173
0.0210	±	0.002	2	1080	+	2	7628	51%	0.0213	4.21	±	0.036	0.0174	4.14	±	0.037	0.0187
0.0220	±	0.002	3	7628				44%	0.0228	4.47	±	0.102	0.0159	4.40	±	0.105	0.0172
0.0230	±	0.002	2	2116	+	2	7628	45%	0.0233	4.43	±	0.110	0.0162	4.36	±	0.113	0.0174
0.0230	±	0.002	3	7628				45%	0.0238	4.40	±	0.090	0.0163	4.33	±	0.092	0.0175
0.0250	±	0.002	2	1080	+	3	7628	46%	0.0256	4.38	±	0.020	0.0164	4.31	±	0.020	0.0177
0.0280	±	0.002	2	2116	+	3	7628	41%	0.0283	4.54	±	0.076	0.0155	4.48	±	0.078	0.0167
0.0290	±	0.002	2	2116	+	3	7628	44%	0.0294	4.45	±	0.038	0.0160	4.39	±	0.039	0.0172
0.0300	±	0.002	4	7628				44%	0.0304	4.47	±	0.102	0.0159	4.40	±	0.105	0.0172
0.0310	±	0.003	4	7628				45%	0.0318	4.40	±	0.115	0.0163	4.33	±	0.119	0.0175
0.0620	±	0.003	8	7628				45%	0.0636	4.40	±	0.056	0.0163	4.33	±	0.058	0.0175
0.0620	±	0.003	2	7628	+	7	7628	40%	0.0630	4.60	±	0.079	0.0152	4.54	±	0.081	0.0164

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PREPREG

Glass	RC%	2 GHz Dk	2GHz Df	10GHz Dk	10GHz Df	Thickness (inches)
1027	74	3.64	0.0205	3.55	0.0219	0.0018
106	75	3.61	0.0206	3.53	0.0221	0.0025
106	83	3.46	0.0215	3.36	0.0230	0.0038
1080	65	3.84	0.0194	3.76	0.0208	0.0033
1080	71	3.70	0.0202	3.62	0.0216	0.0041
2113	57	4.04	0.0183	3.97	0.0196	0.0042
2113	61	3.94	0.0189	3.86	0.0202	0.0047
2116	56	4.07	0.0181	4.00	0.0194	0.0054
7628	44.0	4.45	0.0160	4.38	0.0173	0.0077

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