

Dielectric Constant(Dk) / Dissipation factor (Df) Table

Core Data

Construction	Resin Content %	Standard/ Alternate	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)					
					100 MHz	500 MHz	1 GHz	2 GHz	5 GHz	10 GHz
1x106	69.0%	Alternate	0.0020	0.051	3.58 0.0150	3.54 0.0170	3.52 0.0200	3.49 0.0210	3.46 0.0220	3.46 0.0240
1x106	73.0%	Standard	0.0025	0.064	3.51 0.0160	3.47 0.0180	3.45 0.0200	3.42 0.0210	3.39 0.0230	3.39 0.0250
1x1080	61.0%	Standard	0.0030	0.076	3.73 0.0140	3.69 0.0160	3.68 0.0180	3.65 0.0190	3.62 0.0200	3.62 0.0220
2x106	66.0%	Standard	0.0035	0.089	3.64 0.0150	3.60 0.0170	3.58 0.0190	3.55 0.0200	3.52 0.0210	3.52 0.0240
1x2116	43.0%	Standard	0.0040	0.102	4.16 0.0120	4.13 0.0130	4.13 0.0150	4.10 0.0150	4.07 0.0160	4.07 0.0180
106/1080	58.0%	Alternate	0.0042	0.107	3.78 0.0140	3.75 0.0160	3.73 0.0180	3.70 0.0190	3.68 0.0200	3.68 0.0220
106/1080	61.0%	Standard	0.0045	0.114	3.73 0.0140	3.69 0.0160	3.68 0.0180	3.65 0.0190	3.62 0.0200	3.62 0.0220
106/1080	64.0%	Alternate	0.0050	0.127	3.67 0.0150	3.64 0.0160	3.62 0.0190	3.59 0.0200	3.56 0.0210	3.56 0.0230
2x1080	56.0%	Standard	0.0050	0.127	3.83 0.0140	3.80 0.1520	3.79 0.0170	3.76 0.0180	3.74 0.0190	3.74 0.0210
106/2113	53.0%	Standard	0.0053	0.135	3.90 0.0130	3.86 0.0150	3.85 0.0170	3.82 0.0170	3.80 0.0180	3.80 0.0200
106/2116	49.0%	Standard	0.0060	0.152	3.99 0.0130	3.96 0.0140	3.94 0.0160	3.92 0.0170	3.89 0.0170	3.89 0.0190
1080/2116	51.0%	Standard	0.0070	0.178	3.94 0.0130	3.91 0.0140	3.89 0.0160	3.87 0.0170	3.84 0.0180	3.84 0.0200
2x1080/106	63.0%	Standard	0.0080	0.203	3.69 0.0140	3.65 0.0160	3.64 0.0190	3.61 0.0190	3.58 0.0200	3.58 0.0230
2113/2116	47.0%	Standard	0.0080	0.203	4.03 0.0120	4.00 0.0140	3.99 0.0160	3.97 0.0160	3.94 0.0170	3.94 0.0190
2x2113/106	54.0%	Standard	0.0090	0.229	3.88 0.0130	3.84 0.0150	3.83 0.0170	3.80 0.0180	3.78 0.0180	3.78 0.0210
2x1080/2116	54.0%	Standard	0.0100	0.254	3.88 0.0130	3.84 0.0150	3.83 0.0170	3.80 0.0180	3.78 0.0180	3.78 0.0210
1080/7628/1080	43.0%	Standard	0.0120	0.305	4.16 0.0120	4.13 0.0130	4.13 0.0150	4.10 0.0150	4.07 0.0160	4.07 0.0180
2x7628	39.0%	Standard	0.0140	0.356	4.23 0.0120	4.20 0.0120	4.19 0.0140	4.17 0.0150	4.11 0.0150	4.11 0.0170

2x7628/106	40.0%	Alternate	0.0160	0.406	4.18 0.0120	4.15 0.0130	4.15 0.0140	4.12 0.0150	4.09 0.0150	4.09 0.0170
2x7628/2113	41.0%	Alternate	0.0180	0.457	4.16 0.0120	4.13 0.0130	4.13 0.0150	4.10 0.0150	4.07 0.0160	4.07 0.0170
3x7628	38.0%	Alternate	0.0200	0.508	4.24 0.0120	4.21 0.0120	4.20 0.0140	4.16 0.0140	4.13 0.0150	4.13 0.0170
3x7628/2116	40.0%	Alternate	0.0240	0.610	4.18 0.0120	4.15 0.0130	4.15 0.0140	4.12 0.0150	4.09 0.0150	4.09 0.0170
4x7628	39.0%	Standard	0.0280	0.711	4.23 0.0120	4.20 0.0120	4.19 0.0140	4.14 0.0150	4.11 0.0150	4.11 0.0170
4x7628/2116	39.0%	Standard	0.0310	0.787	4.23 0.0110	4.20 0.0120	4.19 0.0140	4.14 0.0140	4.11 0.0150	4.11 0.0170
6x7628	37.0%	Standard	0.0390	0.991	4.24 0.0120	4.21 0.0120	4.21 0.0140	4.18 0.0150	4.15 0.0150	4.15 0.0170
1x2116/ 8x7628	38.0%	Standard	0.0590	1.499	4.24 0.0120	4.21 0.0120	4.20 0.0140	4.16 0.0140	4.13 0.0150	4.13 0.0170

Prepreg Dielectric Constant(Dk) / Dissipation factor (Df) Table

Prepreg Data

Glass Style	Resin Content %	Thickness (inch)	Thickness (mm)	100 MHz	Dielectric Constant (DK)/ Dissipation Factor (DF)				
					500 MHz	1 GHz	2 GHz	5 GHz	10 GHz
106	75.00%	0.0024	0.061	3.48 0.0158	3.43 0.0180	3.41 0.0208	3.38 0.0218	3.35 0.0229	3.35 0.0259
1080	65.00%	0.0032	0.081	3.66 0.0146	3.62 0.0165	3.60 0.0189	3.57 0.0198	3.54 0.0207	3.54 0.0233
2113	57.00%	0.004	0.102	3.81 0.0136	3.78 0.0153	3.76 0.0174	3.74 0.0181	3.71 0.0190	3.71 0.0212
2116	54.00%	0.005	0.127	3.88 0.0133	3.84 0.0148	3.83 0.0169	3.80 0.0175	3.78 0.0183	3.78 0.0205
7628	42.00%	0.0078	0.198	4.14 0.0119	4.11 0.0129	4.11 0.0149	4.08 0.0151	4.05 0.0158	4.05 0.0175

NOTE

Revisions:

A-Original-4/17

B-Modified construction offering 6/19

C-Correct 31 mil core thickness 9/19

D-Corrected 20 mil construction 7/20

Standard-Commonly available with the best availability.

Alternate-Available, but not stocked with longer lead time

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