

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	73.0%	Standard	0.0025	0.064	3.51 0.0032	3.47 0.0037	3.45 0.0038	3.42 0.0042	3.39 0.0049	3.39 0.0053
2x106	66.0%	Standard	0.0035	0.089	3.64 0.0047	3.60 0.0052	3.58 0.0058	3.55 0.0063	3.50 0.0070	3.50 0.0073
106/1080	58.0%	Alternate	0.0042	0.107	3.70 0.0056	3.75 0.0061	3.73 0.0067	3.70 0.0072	3.65 0.0080	3.65 0.0083
106/1080	64.0%	Alternate	0.0050	0.127	3.67 0.0064	3.63 0.0070	3.62 0.0076	3.59 0.0081	3.55 0.0089	3.55 0.0092
106/2113	53.0%	Standard	0.0053	0.135	3.90 0.0071	3.88 0.0079	3.85 0.0087	3.82 0.0092	3.78 0.0100	3.78 0.0103
1080/2116	51.0%	Standard	0.0070	0.178	3.93 0.0093	3.90 0.0101	3.87 0.0109	3.84 0.0114	3.79 0.0122	3.79 0.0125
2113/2116	47.0%	Standard	0.0080	0.203	4.00 0.0104	3.97 0.0112	3.94 0.0120	3.91 0.0125	3.86 0.0133	3.86 0.0136
2x1080/2116	54.0%	Standard	0.0100	0.254	3.88 0.0130	3.84 0.0140	3.83 0.0147	3.80 0.0152	3.76 0.0160	3.76 0.0163
2x7628	39.0%	Standard	0.0140	0.356	4.23 0.0179	4.19 0.0189	4.17 0.0196	4.14 0.0201	4.10 0.0209	4.10 0.0212
2x7628/2113	41.0%	Alternate	0.0180	0.457	4.15 0.0231	4.13 0.0241	4.13 0.0248	4.10 0.0253	4.07 0.0261	4.07 0.0264
3x7628/2116	40.0%	Alternate	0.0240	0.610	4.18 0.0313	4.15 0.0323	4.15 0.0330	4.13 0.0335	4.09 0.0343	4.09 0.0346
4x7628/2116	39.0%	Standard	0.0310	0.787	4.23 0.0411	4.19 0.0421	4.19 0.0428	4.16 0.0433	4.12 0.0441	4.12 0.0444
1x2116/ 8x7628	38.0%	Standard	0.0590	1.499	4.24 0.0120 0.0120	4.21 0.0120 0.0120	4.20 0.0140 0.0140	4.18 0.0150 0.0140	4.15 0.0150 0.0150	4.15 0.0170 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
1080	65.00%	0.0032	0.081	3.660	3.620	3.590	3.570	3.540	3.540
2116	54.00%	0.005	0.127	3.880	3.840	3.830	3.800	3.780	3.780
7628	42.00%	0.0078	0.198	3.136	3.153	3.174	3.181	3.180	3.182
				0.0133	0.0148	0.0169	0.0175	0.0183	0.0205
				0.0119	0.0129	0.0149	0.0151	0.0158	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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