

## Dielectric Constant (DK) / Dissipation Factor (DF) Table

### Core Data

Construction	Resin Content %		Thickness (inch)	Thickness (mm)	Dielectric Constant (DK) / Dissipation Factor (DF)					
					100 MHz	500 MHz	1 GHz	2 GHz	5 GHz	10 GHz
1x106	70.0%	Alternate	0.0020	0.051	3.70 0.015	3.60 0.017	3.60 0.020	3.60 0.021	3.60 0.024	3.60 0.029
1x106	74.0%	Standard	0.0025	0.064	3.60 0.016	3.60 0.018	3.50 0.020	3.50 0.021	3.50 0.025	3.50 0.030
1x1080	61.0%	Standard	0.0030	0.076	3.80 0.014	3.80 0.016	3.80 0.018	3.80 0.019	3.70 0.022	3.70 0.026
2x106	66.0%	Standard	0.0035	0.089	3.70 0.015	3.70 0.016	3.70 0.019	3.70 0.020	3.60 0.023	3.60 0.028
1x2116	45.0%	Standard	0.0040	0.102	4.20 0.012	4.20 0.014	4.10 0.016	4.10 0.016	4.10 0.019	4.10 0.022
106/1080	58.0%	Alternate	0.0042	0.107	3.90 0.013	3.80 0.015	3.80 0.017	3.80 0.018	3.80 0.021	3.80 0.249
106/1080	62.0%	Standard	0.0045	0.114	3.80 0.014	3.80 0.016	3.80 0.018	3.80 0.019	3.70 0.022	3.70 0.026
106/1080	65.0%	Alternate	0.0050	0.127	3.80 0.014	3.70 0.016	3.70 0.019	3.70 0.020	3.70 0.023	3.70 0.027
2x1080	57.0%	Standard	0.0050	0.127	3.90 0.013	3.80 0.015	3.90 0.017	3.80 0.018	3.80 0.021	3.80 0.249
106/2113	53.0%	Standard	0.0053	0.135	4.00 0.013	4.00 0.015	3.90 0.017	3.90 0.017	3.90 0.020	3.90 0.024
106/2116	49.0%	Standard	0.0060	0.152	4.10 0.013	4.00 0.014	4.00 0.016	4.00 0.016	4.00 0.019	4.00 0.022
1080/2116	51.0%	Standard	0.0070	0.178	4.00 0.013	4.00 0.014	4.00 0.016	4.00 0.017	3.90 0.020	3.90 0.023

Construction	Resin Content %		Thickness (inch)	Thickness (mm)	Dielectric Constant (DK) / Dissipation Factor (DF)					
					100 MHz	500 MHz	1 GHz	2 GHz	5 GHz	10 GHz
2113/2116	47.0%	Standard	0.0080	0.203	4.10 0.012	4.10 0.014	4.10 0.016	4.10 0.016	4.00 0.019	4.00 0.022
2113/2116	48.0%	Standard	0.0080	0.203	4.10 0.012	4.10 0.014	4.10 0.016	4.00 0.016	4.00 0.019	4.00 0.022
2x2113/106	54.0%	Standard	0.0090	0.229	4.00 0.013	3.90 0.015	3.90 0.017	3.90 0.017	3.90 0.020	3.90 0.024
2x1080/2116	54.0%	Standard	0.0100	0.254	4.00 0.013	3.90 0.015	3.90 0.017	3.90 0.017	3.90 0.020	3.90 0.024
7628/2x1080	45.0%	Standard	0.0120	0.305	4.20 0.012	4.20 0.014	4.10 0.016	4.10 0.016	4.10 0.019	4.10 0.022
2x7628	39.0%	Standard	0.0140	0.356	4.30 0.011	4.30 0.012	4.20 0.014	4.20 0.014	4.20 0.017	4.20 0.019
2x7628/1080	42.0%	Alternate	0.0160	0.406	4.00 0.009	4.00 0.009	4.00 0.010	4.00 0.011	4.00 0.011	4.00 0.011
2x7628/2116	41.0%	Alternate	0.0180	0.457	4.10 0.009	4.10 0.009	4.00 0.010	4.00 0.011	4.00 0.011	4.00 0.011
2x2113/2x7628	42.0%	Alternate	0.0200	0.508	4.20 0.012	4.20 0.013	4.20 0.015	4.20 0.015	4.10 0.018	4.10 0.020
3x7628/2116	40.0%	Alternate	0.0240	0.610	4.30 0.011	4.20 0.012	4.20 0.014	4.20 0.015	4.20 0.017	4.20 0.020
4x7628	39.0%	Standard	0.0280	0.711	4.30 0.011	4.30 0.012	4.20 0.014	4.20 0.014	4.20 0.017	4.20 0.019
4x7628/2116	39.0%	Standard	0.0310	0.787	4.30 0.011	4.30 0.012	4.20 0.014	4.20 0.014	4.20 0.017	4.20 0.019
6x7628	36.0%	Standard	0.0390	0.991	4.30 0.010	4.30 0.012	4.30 0.013	4.30 0.014	4.30 0.016	4.30 0.018
1x2116/ 8x7628	38.0%	Standard	0.0590	1.499	4.30 0.011	4.30 0.012	4.30 0.014	4.30 0.014	4.20 0.017	4.20 0.019

## Dielectric Constant (DK) / Dissipation Factor (DF) Table

### Prepreg Data

Glass Style	Resin Content %	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK) / Dissipation Factor (DF)					
				100 MHz	500 MHz	1 GHz	2 GHz	5 GHz	10 GHz
106	75.0%	0.0025	0.064	3.59 0.0156	3.55 0.0177	3.53 0.0205	3.50 0.0215	3.48 0.0255	3.48 0.0302
1080	65.0%	0.0032	0.081	3.76 0.0144	3.72 0.0163	3.70 0.0187	3.67 0.0195	3.66 0.0231	3.66 0.0272
2113	57.0%	0.0044	0.112	3.91 0.0135	3.87 0.0152	3.86 0.0173	3.83 0.0180	3.82 0.0211	3.82 0.0247
2116	54.0%	0.0052	0.132	3.97 0.0132	3.93 0.0147	3.92 0.0167	3.89 0.0174	3.88 0.0203	3.88 0.0238
7628	42.0%	0.0074	0.188	4.22 0.0115	4.19 0.0128	4.18 0.0145	4.17 0.0150	4.14 0.0175	4.14 0.0201

## NOTE

Revisions:

A-Original-4/17

B-Modified construction offering 6/19

C-Correct 31 mil core thickness 9/19

Standard-Commonly available with the best availability.

Alternate-Available, but not stocked with longer lead time