

## 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	15 GHz	20 GHz
1x1067	68.0%	Std/Spread	0.0020	0.051	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025
1x1067	72.0%	Std/Spread	0.0025	0.064	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023
1x1078	65.0%	Std/Spread	0.0030	0.076	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027
1x1086	67.0%	Std/Spread	0.0035	0.089	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026
2x1035	67.0%	Std/Spread	0.0040	0.102	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026
1x3313	57.0%	Standard	0.0040	0.102	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032
2x1067	72.0%	Std/Spread	0.0050	0.127	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023
1x2116	56.0%	Standard	0.0050	0.127	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033
2x1078	65.0%	Alt/Spread	0.0060	0.152	3.33 0.0029	3.33 0.0029	3.33 0.0029	3.33 0.0029	3.33 0.0029	3.33 0.0029	3.33 0.0029	3.33 0.0029
2x1080	66.0%	Std/Spread	0.0060	0.152	3.31 0.0026	3.31 0.0026	3.31 0.0026	3.31 0.0027	3.31 0.0027	3.31 0.0027	3.31 0.0027	3.31 0.0027
2x3313	57.0%	Standard	0.0080	0.203	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032
2x3313	61.0%	Alternate	0.0100	0.254	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030

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	15 GHz	20 GHz
2x3313	64.0%	Alternate	0.0100	0.254	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028
3x3313	57.0%	Alternate	0.0120	0.305	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032	3.53 0.0032
2x2116/1086	58.0%	Alternate	0.0133	0.338	3.51 0.0032	3.51 0.0032	3.51 0.0032	3.51 0.0032	3.51 0.0032	3.51 0.0032	3.51 0.0032	3.51 0.0032
2x2116/3313	56.0%	Alternate	0.0140	0.356	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033
2x3313/2x2116	55.0%	Alternate	0.0180	0.457	3.59 0.0034	3.59 0.0034	3.59 0.0034	3.59 0.0034	3.59 0.0034	3.59 0.0034	3.59 0.0034	3.59 0.0034
5x3313	63.0%	Standard	0.0240	0.610	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028	3.38 0.0028

## NOTE

Revisions:

A-Original-4/17

B-Added Standard & Alternate construction-8/18

Standard-Commonly available with the best availability.

Alternate-Available, but not stocked with longer lead time

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

### Prepreg Data

Glass Style	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	15 GHz	20 GHz
1035	65.5%	Alt/Spread	0.0018	0.046	3.30 0.0028	3.30 0.0028	3.30 0.0028	3.30 0.0028	3.30 0.0028	3.30 0.0028	3.30 0.0028	3.30 0.0028
1035	67.0%	Alt/Spread	0.0020	0.051	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026	3.28 0.0026
1067	69.0%	Alt/Spread	0.0022	0.056	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024
1067	72.0%	Alt/Spread	0.0025	0.064	3.17 0.0022	3.17 0.0022	3.17 0.0022	3.17 0.0022	3.17 0.0022	3.17 0.0022	3.17 0.0022	3.17 0.0022
1035	73.0%	Alt/Spread	0.0026	0.066	3.14 0.0021	3.14 0.0021	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022
1067	76.0%	Alt/Spread	0.0030	0.076	3.08 0.0020	3.08 0.0020	3.08 0.0020	3.08 0.0020	3.08 0.0020	3.08 0.0020	3.08 0.0020	3.08 0.0020
1086	65.0%	Alt/Spread	0.0034	0.086	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027
1080	70.0%	Alternate	0.0035	0.089	3.21 0.0024	3.21 0.0024	3.21 0.0024	3.21 0.0024	3.21 0.0024	3.21 0.0024	3.21 0.0024	3.21 0.0024
1078	69.0%	Alt/Spread	0.0035	0.089	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024	3.24 0.0024
1086	68.0%	Alternate	0.0037	0.094	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025
3313	57.0%	Alternate	0.0040	0.102	3.53 0.0032	3.53 0.0032	3.53 0.0033	3.53 0.0033	3.53 0.0033	3.53 0.0033	3.53 0.0033	3.53 0.0033
1080	73.0%	Alternate	0.0040	0.102	3.14 0.0021	3.14 0.0021	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022

Glass Style	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	15 GHz	20 GHz
1078	73.0%	Std/Spread	0.0041	0.104	3.14 0.0021	3.14 0.0021	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022	3.14 0.0022
1086	71.0%	Standard	0.0042	0.107	3.19 0.0023	3.19 0.0023	3.19 0.0023	3.19 0.0023	3.19 0.0023	3.19 0.0023	3.19 0.0023	3.19 0.0023
1078	75.0%	Alternate	0.0043	0.109	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020
1080	75.0%	Standard	0.0044	0.112	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020	3.10 0.0020
3313	61.0%	Alternate	0.0046	0.117	3.43 0.0030	3.43 0.0030	3.43 0.0030	3.43 0.0030	3.43 0.0030	3.43 0.0030	3.43 0.0030	3.43 0.0030
3313	64.0%	Alternate	0.0050	0.127	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028
2116	59.0%	Alternate	0.0056	0.142	3.48 0.0031	3.48 0.0031	3.48 0.0031	3.48 0.0031	3.48 0.0031	3.48 0.0031	3.48 0.0031	3.48 0.0031
2116	62.0%	Alternate	0.0060	0.152	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029

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