

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

Core Data

Construction	Resin Content %	Offering	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK) / Dissipation Factor (DF)					
					1 GHz	2 GHz	5 GHz	10 GHz	15 GHz	20 GHz
1x1067	65.5%	Standard	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
1x1067	71.0%	Standard	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
1x1078	64.0%	Standard	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
1x1080	65.0%	Alternate	0.0030	0.076	3.31 0.0026	3.31 0.0026	3.31 0.0026	3.31 0.0026	3.31 0.0026	3.31 0.0026
1x1086	65.0%	Standard	0.0035	0.089	3.29 0.0026	3.29 0.0026	3.29 0.0026	3.29 0.0026	3.29 0.0026	3.29 0.0026
1x3313	55.0%	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
2x1035	65.5%	Standard	0.0040	0.102	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025
1x2116	54.5%	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
2x1067	70.5%	Standard	0.0050	0.127	3.18 0.0023	3.18 0.0023	3.18 0.0023	3.18 0.0023	3.18 0.0023	3.18 0.0023
2x1078	64.0%	Alternate	0.0060	0.152	3.38 0.0027	3.38 0.0027	3.38 0.0027	3.38 0.0027	3.38 0.0027	3.38 0.0027
2x1080	64.5%	Alternate	0.0060	0.152	3.33 0.0026	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027	3.33 0.0027
2x1086	61.0%	Standard	0.0060	0.152	3.32 0.0028	3.32 0.0028	3.32 0.0028	3.32 0.0028	3.32 0.0028	3.32 0.0028

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					1 GHz	2 GHz	5 GHz	10 GHz	15 GHz	20 GHz
2x3313	55.0%	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
2x3313	59.0%	Alternate	0.0090	0.229	3.43 0.0030	3.43 0.0030	3.43 0.0030	3.43 0.0030	3.43 0.0030	3.43 0.0030
2x3313	63.0%	Alternate	0.0100	0.254	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028
3x3313	55.0%	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
2x2116/1086	55.5%	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
2x2116/3313	55.6%	Alternate	0.0140	0.356	3.51 0.0031	3.51 0.0031	3.51 0.0031	3.51 0.0031	3.51 0.0031	3.51 0.0031
2x3313/2x2116	55.7%	Alternate	0.0180	0.457	3.50 0.0031	3.50 0.0031	3.50 0.0031	3.50 0.0031	3.50 0.0031	3.50 0.0031
5x3313	61.0%	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

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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)					
					1 GHz	2 GHz	5 GHz	10 GHz	15 GHz	20 GHz
1035	65.5%	Alternate	0.0020	0.051	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%	Standard	0.0022	0.056	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%	Standard	0.0024	0.061	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%	Standard	0.0026	0.066	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%	Standard	0.0027	0.069	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%	Standard	0.0032	0.081	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%	Standard	0.0035	0.089	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%	Standard	0.0037	0.094	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%	Standard	0.0037	0.094	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%	Standard	0.0039	0.099	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	0.0043	0.109	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%	Standard	0.0042	0.107	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)					
					1 GHz	2 GHz	5 GHz	10 GHz	15 GHz	20 GHz
1078	73.0%	Alternate	0.0043	0.109	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%	Alternate	0.0044	0.112	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%	Standard	0.0047	0.119	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%	Alternate	0.0046	0.117	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%	Standard	0.0048	0.122	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	63.0%	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
3313	64.0%	Standard	0.0053	0.135	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%	Standard	0.0057	0.145	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	0.0063	0.160	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029

NOTE

Revisions:

A-Original-4/17

B-Added Standard & Alternate construction-8/18

C-Corrected Availability 2/19

D-Adjusted core thickness and PP RC% 3/19

E-Added 2x1086 6 mil core 10/19

F-Added 1x1080 3 mil and 2x3313 9 mil core, weave type clarified 1/20

G-Removed Weave Type, added 3313 63% RC prepreg as alternate 9/20

All I-Tera MT40 glass is Spread Weave in both directions

Standard-Commonly available

Alternate-Available, but not stocked