

## 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

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
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

The Isola name and logo are registered trademarks of Isola Corp. USA in the USA and other countries. I-Tera<sup>®</sup> MT40 is a registered trademark of Isola USA Corp. in the USA. All other trademarks mentioned herein are property of their respective owners. © 2016, Isola Group, All rights reserved.



## 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	0.0510	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	0.0560	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	0.0610	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	0.0660	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	0.0690	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	0.0810	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	0.0890	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	0.0940	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	0.0940	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	0.0990	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	0.1090	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	0.1070	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	0.1090	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	0.1120	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	0.1190	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	0.1170	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	0.1220	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%	Standard	0.0053	0.1350	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	0.1450	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	0.1600	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

All FR408HR glass is Spread Weave in both directions

Standard-Commonly available

Alternate-Available, but not stocked