

## 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	73.0%	0.002	0.051	3.36 0.0103	3.32 0.0116	3.31 0.0133	3.29 0.0139	3.27 0.0147	3.26 0.0145
1x1080	59.0%	0.0027	0.069	3.63 0.0096	3.61 0.0106	3.60 0.0120	3.58 0.0124	3.57 0.0131	3.56 0.0129
1x1080	64.0%	0.003	0.076	3.52 0.0100	3.50 0.0110	3.49 0.0124	3.47 0.0129	3.46 0.0137	3.45 0.0135
2x106	67.0%	0.0035	0.089	3.46 0.0100	3.44 0.0112	3.43 0.0127	3.41 0.0133	3.39 0.0140	3.38 0.0138
1x3313	49.0%	0.0035	0.089	3.86 0.0090	3.84 0.0099	3.83 0.0110	3.82 0.0114	3.80 0.0120	3.80 0.0118
1x3313	54.0%	0.004	0.102	3.74 0.0093	3.72 0.0103	3.71 0.0115	3.70 0.0119	3.68 0.0125	3.67 0.0124
2x106	70.0%	0.004	0.102	3.40 0.0101	3.38 0.0114	3.37 0.0130	3.35 0.0136	3.33 0.0144	3.32 0.0142
1x3070	48.0%	0.004	0.102	3.88 0.0090	3.87 0.0098	3.86 0.0109	3.84 0.0113	3.83 0.0119	3.82 0.0117
106/1080	61.0%	0.0043	0.109	3.58 0.0097	3.56 0.0108	3.55 0.0122	3.54 0.0126	3.52 0.0133	3.51 0.0132
1x2116	52.0%	0.0048	0.122	3.76 0.0092	3.74 0.0102	3.73 0.0113	3.72 0.0117	3.71 0.0123	3.70 0.0123
2x1080	57.0%	0.005	0.127	3.67 0.0095	3.65 0.0105	3.64 0.0118	3.63 0.0122	3.61 0.0129	3.60 0.0127
1x2116	53.0%	0.005	0.127	3.76 0.0092	3.74 0.0102	3.73 0.0114	3.72 0.0118	3.71 0.0124	3.70 0.0123
106/2113	56.0%	0.0053	0.135	3.69 0.0094	3.67 0.0104	3.66 0.0117	3.65 0.0121	3.63 0.0128	3.63 0.0126
1x1652	46.0%	0.0055	0.14	3.94 0.0089	3.92 0.0097	3.91 0.0108	3.90 0.0111	3.88 0.0116	3.88 0.0125
106/2113	58.0%	0.0055	0.14	3.65 0.0095	3.63 0.0105	3.62 0.0119	3.60 0.0123	3.59 0.0130	3.58 0.0128
1080/2113	54.0%	0.006	0.152	3.74 0.0093	3.72 0.0103	3.71 0.0115	3.70 0.0119	3.68 0.0125	3.67 0.0124
1x1652	50.0%	0.006	0.152	3.84 0.0091	3.82 0.0100	3.81 0.0111	3.79 0.0115	3.78 0.0121	3.77 0.0119
2x1080	63.0%	0.006	0.152	3.54 0.0098	3.52 0.0109	3.51 0.0123	3.49 0.0128	3.48 0.0136	3.47 0.0134

2x3313	54.0%	0.008	0.203	3.74 0.0093	3.72 0.0103	3.71 0.0115	3.70 0.0119	3.68 0.0125	3.67 0.0124
2x2116	53.0%	0.01	0.254	3.75 0.0092	3.73 0.0102	3.72 0.0114	3.71 0.0118	3.69 0.0124	3.68 0.0123
1x1080/2x2116	52.0%	0.012	0.305	3.76 0.0092	3.74 0.0102	3.73 0.0113	3.72 0.0117	3.71 0.0123	3.70 0.0123
3x2116	52.0%	0.014	0.356	3.76 0.0092	3.74 0.0102	3.73 0.0113	3.72 0.0117	3.71 0.0123	3.70 0.0123
2x7628/1080	42.0%	0.016	0.406	4.04 0.0087	4.02 0.0094	4.01 0.0104	4.00 0.0107	3.99 0.0112	3.99 0.0110
2x7628/2116	41.0%	0.018	0.457	4.07 0.0086	4.05 0.0094	4.04 0.0103	4.03 0.0106	4.02 0.0111	4.01 0.0109

## Prepreg 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%	0.0023	0.058	3.31 0.0104	3.28 0.0117	3.27 0.0135	3.25 0.0141	3.23 0.0150	3.23 0.0147
1080	65.0%	0.0031	0.079	3.50 0.0099	3.48 0.0110	3.47 0.0127	3.45 0.0131	3.43 0.0138	3.43 0.0136
1080	68.0%	0.0034	0.086	3.44 0.0100	3.42 0.0112	3.41 0.0128	3.39 0.0134	3.37 0.0141	3.36 0.0139
3313	53.0%	0.0037	0.094	3.76 0.0092	3.74 0.0102	3.73 0.0114	3.72 0.0118	3.71 0.0124	3.70 0.0123
1080	71.0%	0.0038	0.097	3.38 0.0102	3.35 0.0115	3.35 0.0131	3.33 0.0137	3.31 0.0145	3.30 0.0143
2113	57.0%	0.0040	0.102	3.67 0.0095	3.65 0.0105	3.64 0.0118	3.63 0.0122	3.61 0.0129	3.60 0.0127
3313	59.0%	0.0041	0.104	3.74 0.0096	3.72 0.0106	3.71 0.0120	3.70 0.0124	3.68 0.0131	3.67 0.0129
2116	56.0%	0.0051	0.130	3.69 0.0094	3.67 0.0104	3.66 0.0117	3.65 0.0121	3.63 0.0128	3.63 0.0126
1652	50.0%	0.0058	0.147	3.84 0.0091	3.82 0.0100	3.81 0.0111	3.79 0.0115	3.78 0.0121	3.77 0.0119
7628	44.0%	0.0071	0.180	3.99 0.0088	3.97 0.0096	3.96 0.0106	3.95 0.0110	3.94 0.0110	3.93 0.0110

### NOTE

Revisions:

A - Original Release - 4/17

B - Added Standard & Alternate construction-8/18

Isola, the Isola logo, Astra, Chronon, GETEK, I-Fill, IsoDesign, IsoStack, I-Speed, I-Tera, Polyclad, Stratus, TerraGreen, and The Base for Innovation are registered trademarks or trademarks of ISOLA USA Corp. in the United States and in other countries. Copyright © 2021 Isola Group. All rights reserved.