

Dielectric Constant(Dk) / Dissipation factor (Df) Table

Core Data

Construction	Resin Content %	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)				
				2 GHz	5 GHz	10 GHz	15 GHz	20 GHz
1x1067	65.5%	0.0020	0.051	3.30 0.0026	3.30 0.0026	3.30 0.0026	3.30 0.0026	3.30 0.0026
1x1067	71.0%	0.0025	0.064	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023	3.17 0.0023
1x1078	64.0%	0.0030	0.076	3.34 0.0027	3.34 0.0027	3.34 0.0027	3.34 0.0027	3.34 0.0027
1x1080	65.0%	0.0030	0.076	3.31 0.0027	3.31 0.0027	3.31 0.0027	3.31 0.0027	3.31 0.0027
1x1086	65.0%	0.0035	0.089	3.31 0.0027	3.31 0.0027	3.31 0.0027	3.31 0.0027	3.31 0.0027
1x3313	55.0%	0.0040	0.102	3.55 0.0033	3.55 0.0033	3.55 0.0033	3.55 0.0033	3.55 0.0033
2x1035	65.5%	0.0040	0.102	3.30 0.0026	3.30 0.0026	3.30 0.0026	3.30 0.0026	3.30 0.0026
1x3313	59.0%	0.0045	0.114	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030
1x2116	54.5%	0.0050	0.127	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033
2x1067	70.5%	0.0050	0.127	3.18 0.0023	3.18 0.0023	3.18 0.0023	3.18 0.0023	3.18 0.0023
2x1086	61.0%	0.0060	0.152	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029
1x2116	60.0%	0.0060	0.152	3.42 0.0029	3.42 0.0029	3.42 0.0029	3.42 0.0029	3.42 0.0029
2x1086	64.0%	0.0070	0.178	3.34 0.0027	3.34 0.0027	3.34 0.0027	3.34 0.0027	3.34 0.0027
2x3313	55.0%	0.0080	0.203	3.55 0.0033	3.55 0.0033	3.55 0.0033	3.55 0.0033	3.55 0.0033
2x2116	63.0%	0.0100	0.254	3.56 0.0028	3.56 0.0028	3.56 0.0028	3.56 0.0028	3.56 0.0028
3x3313	55.0%	0.0120	0.305	3.55 0.0033	3.55 0.0033	3.55 0.0033	3.55 0.0033	3.55 0.0033
2x2116/3313	55.6%	0.0140	0.356	3.54 0.0032	3.54 0.0032	3.54 0.0032	3.54 0.0032	3.54 0.0032
2x3313/2x2116	55.7%	0.0180	0.457	3.54 0.0032	3.54 0.0032	3.54 0.0032	3.54 0.0032	3.54 0.0032

5x3313	61.0%	0.0240	0.610	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029
8x3313	63.0%	0.0400	1.016	3.56 0.0028	3.56 0.0028	3.56 0.0028	3.56 0.0028	3.56 0.0028
12x3313	63.0%	0.0600	1.524	3.56 0.0028	3.56 0.0028	3.56 0.0028	3.56 0.0028	3.56 0.0028

Prepreg Dielectric Constant(Dk) / Dissipation factor (Df) Table

Prepreg Data

Glass Style	Resin content %	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)				
				2 GHz	5 GHz	10 GHz	15 GHz	20 GHz
1035	67.0%	0.0022	0.056	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025	3.26 0.0025
1067	69.0%	0.0024	0.061	3.22 0.0024	3.22 0.0024	3.22 0.0024	3.22 0.0024	3.22 0.0024
1067	72.0%	0.0026	0.066	3.15 0.0022	3.15 0.0022	3.15 0.0022	3.15 0.0022	3.15 0.0022
1035	73.0%	0.0027	0.069	3.12 0.0022	3.12 0.0022	3.12 0.0022	3.12 0.0022	3.12 0.0022
1067	76.0%	0.0032	0.081	3.05 0.0020	3.05 0.0020	3.05 0.0020	3.05 0.0020	3.05 0.0020
1080	70.0%	0.0037	0.094	3.19 0.0024	3.19 0.0024	3.19 0.0024	3.19 0.0024	3.19 0.0024
1086	68.0%	0.0039	0.099	3.24 0.0025	3.24 0.0025	3.24 0.0025	3.24 0.0025	3.24 0.0025
3313	57.0%	0.0043	0.109	3.50 0.0031	3.50 0.0031	3.50 0.0031	3.50 0.0031	3.50 0.0031
1078	73.0%	0.0043	0.109	3.12 0.0022	3.12 0.0022	3.12 0.0022	3.12 0.0022	3.12 0.0022
1086	71.0%	0.0044	0.112	3.16 0.0023	3.16 0.0023	3.16 0.0023	3.16 0.0023	3.16 0.0023
1080	75.0%	0.0046	0.117	3.08 0.0021	3.08 0.0021	3.08 0.0021	3.08 0.0021	3.08 0.0021
1078	75.0%	0.0047	0.119	3.08 0.0021	3.08 0.0021	3.08 0.0021	3.08 0.0021	3.08 0.0021
3313	61.0%	0.0048	0.122	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029	3.41 0.0029
3313	64.0%	0.0053	0.135	3.34 0.0027	3.34 0.0027	3.34 0.0027	3.34 0.0027	3.34 0.0027
2116	59.0%	0.0057	0.145	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030
2116	62.0%	0.0063	0.160	3.38 0.0028	3.38 0.0029	3.38 0.0029	3.38 0.0029	3.38 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

H-Corrected Dk values for 3 mil 1x1080, 6 mil 2x1086 & 2x1078 11/21

I- Corrected discrepancies between core and prepreg Dk/Df values 2/23

J-Removed 6.0 mil 1x1078, 6.0 mil 1x1080, 10.0 mil 2x3313 cores

Added 4.5 mil 1x3313, 6.0 mil 1x2116, 7.0 mil 2x1086, 10.0 mil 2x2116, 40.0 mil 8x3313, 60.0 mil 12x3313 cores

Removed 1035 65.5% RC, 1078 69.0% RC, 1080 73% RC, 1086 71% RC, 3313 63% RC prepreps

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

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