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	65.50%	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	71.00%	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	64.00%	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	65.00%	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	61.00%	0.0030	0.076	3.36 0.0029	3.36 0.0029	3.36 0.0029	3.36 0.0029	3.36 0.0029
1x1086	65.00%	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	55.00%	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	65.50%	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	59.00%	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	54.50%	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	70.50%	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	61.00%	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	60.00%	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	64.00%	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	55.00%	0.0080	0.203	3.55 0.0033	3.55 0.0033	3.55 0.0033	3.55 0.0033	3.55 0.0033
2x3313	59.00%	0.0090	0.229	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030	3.45 0.0030
2x2116	54.50%	0.0100	0.254	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033	3.56 0.0033
3x3313	55.00%	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	55.60%	0.0140	0.356	3.54 0.0032	3.54 0.0032	3.54 0.0032	3.54 0.0032	3.54 0.0032
3x2116	57.00%	0.0160	0.406	3.50 0.0031	3.50 0.0031	3.50 0.0031	3.50 0.0031	3.50 0.0031

2x3313/2x2116	55.70%	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	61.00%	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	63.00%	0.0400	1.016	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028
12x3313	63.00%	0.0600	1.524	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 0.0028	3.36 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
1067	65.50%	0.0020	0.051	3.30 0.0026	3.30 0.0026	3.30 0.0026	3.30 0.0026	3.30 0.0026
1035	67.00%	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	69.00%	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	72.00%	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	73.00%	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	76.00%	0.0032	0.081	3.05 0.0020	3.05 0.0020	3.05 0.0020	3.05 0.0020	3.05 0.0020
1086	65.00%	0.0035	0.089	3.31 0.0027	3.31 0.0027	3.31 0.0027	3.31 0.0027	3.31 0.0027
1080	70.00%	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	68.00%	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	57.00%	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	73.00%	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	71.00%	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	75.00%	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	75.00%	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	61.00%	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	64.00%	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	59.00%	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	62.00%	0.0063	0.160	3.38 0.0028	3.38 0.0029	3.38 0.0029	3.38 0.0029	3.38 0.0029

I-Tera® MT40

Very Low-Loss Laminate and Prepreg

Revision No: L | October 24, 2025

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
L-corrected construction / Dk-Df 10mil core 10/25
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 Core: 6.0 mil 1x1078, 6.0 mil 1x1080, 10.0 mil 2x3313

Added Core: 4.5 mil 1x3313, 6.0 mil 1x2116, 7.0 mil 2x1086, 9 mil 2x3313, 10.0 mil 2x2116, 3x2116 16 mil, 40.0 mil 8x3313, 60.0 mil 12x3313
Removed Prepreg: 1035 65.5% RC, 1078 69.0% RC, 1080 73% RC, 3313 63% RC
K-Added 3.0 mil 1086 61% RC - 9/24
L-Corrected resin content and Dk-Df for 10mil core 10/25
All I-Tera MT40 glass is Spread Weave in both directions

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