

## 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	66.0%	0.0020	0.051	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059
1x1067	72.0%	0.0025	0.064	3.45 0.0058	3.45 0.0058	3.45 0.0059	3.45 0.0059	3.45 0.0059
1x1080	66.0%	0.0030	0.076	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059
1x1078	69.5%	0.0035	0.089	3.50 0.0058	3.50 0.0058	3.50 0.0059	3.50 0.0059	3.50 0.0059
1x3313	52.0%	0.0035	0.089	3.89 0.0060	3.89 0.0060	3.89 0.0061	3.89 0.0061	3.89 0.0061
2x1067	66.0%	0.0040	0.102	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059
1x3313	57.0%	0.0040	0.102	3.77 0.0060	3.77 0.0060	3.77 0.0060	3.77 0.0060	3.77 0.0060
1x2116	56.5%	0.0050	0.127	3.79 0.0060	3.79 0.0060	3.79 0.0060	3.78 0.0060	3.78 0.0060
2x1067	72.0%	0.0050	0.127	3.45 0.0058	3.45 0.0058	3.45 0.0059	3.45 0.0059	3.45 0.0059
2x1080	66.0%	0.0060	0.152	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059
2x3313	57.0%	0.0080	0.203	3.77 0.0060	3.77 0.0060	3.77 0.0060	3.77 0.0060	3.77 0.0060
2x2116	56.5%	0.0100	0.254	3.79 0.0060	3.79 0.0060	3.79 0.0060	3.78 0.0060	3.78 0.0060
3x3313	57.0%	0.0120	0.305	3.77 0.0060	3.77 0.0060	3.77 0.0060	3.77 0.0060	3.77 0.0060
3x2116	56.5%	0.0150	0.381	3.79 0.0060	3.79 0.0060	3.79 0.0060	3.78 0.0060	3.78 0.0060
4x2116	56.5%	0.0200	0.508	3.79 0.0060	3.79 0.0060	3.79 0.0060	3.78 0.0060	3.78 0.0060
1x3313/4x2116	56.6%	0.0240	0.610	3.79 0.0060	3.79 0.0060	3.79 0.0060	3.78 0.0060	3.78 0.0060
2x3313/4x2116	56.6%	0.0280	0.711	3.79 0.0060	3.79 0.0060	3.79 0.0060	3.78 0.0060	3.78 0.0060

## 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	66.0%	0.0020	0.051	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059
1067	70.0%	0.0023	0.058	3.49 0.0058	3.49 0.0058	3.49 0.0059	3.49 0.0059	3.49 0.0059
1035	71.5%	0.0024	0.061	3.46 0.0058	3.46 0.0058	3.46 0.0059	3.46 0.0059	3.46 0.0059
1067	74.0%	0.0027	0.069	3.41 0.0058	3.41 0.0058	3.41 0.0059	3.41 0.0059	3.41 0.0059
1067	76.5%	0.0031	0.079	3.36 0.0058	3.36 0.0058	3.36 0.0058	3.36 0.0058	3.36 0.0058
1080	66.0%	0.0031	0.079	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059	3.57 0.0059
1086	64.0%	0.0033	0.084	3.62 0.0059	3.62 0.0059	3.62 0.0060	3.62 0.0060	3.61 0.0060
1080	69.0%	0.0034	0.086	3.51 0.0059	3.51 0.0059	3.51 0.0059	3.51 0.0059	3.51 0.0059
1086	70.0%	0.0040	0.102	3.49 0.0058	3.49 0.0058	3.49 0.0059	3.49 0.0059	3.49 0.0059
3313	57.0%	0.0040	0.102	3.78 0.0060	3.78 0.0060	3.78 0.0060	3.77 0.0060	3.77 0.0060
1078	73.5%	0.0042	0.107	3.42 0.0058	3.42 0.0058	3.42 0.0059	3.42 0.0059	3.42 0.0059
3313	59.0%	0.0043	0.109	3.73 0.0060	3.73 0.0060	3.73 0.0060	3.73 0.0060	3.73 0.0060
2116	56.5%	0.0051	0.130	3.79 0.0060	3.79 0.0060	3.79 0.0060	3.78 0.0060	3.78 0.0060
2116	59.0%	0.0055	0.140	3.73 0.0060	3.73 0.0060	3.73 0.0060	3.73 0.0060	3.73 0.0060

### NOTE

Revisions:

A-Original-4/17

B-Added Standard & Alternate construction-8/18

C- Corrected 3.5 core 2x1078 to 1x1078

D-Removed Weave Type 9/20

E-Removed core: 1x1035 2.0 mil, 1x1086 3.0 mil, 1x1067 3.5 mil, 2x1035 4.0 mil, 1x2116 4.5 mil, 2x1086 6.0 mil, 3x2116 14.0 mil, 1x3313/2x2116 14 mil, 2x1652/2x2116 21 mil

Replaced core: 1x1035 2.0 mil with 1x1067 2.0 mil, 3x1652/2x3313 24 mil with 4x2116/1x3313 24 mil, 3x1652/2x2116 28 mil with 4x2116/2x3313 28.0 mil

Removed prepreg: 1035 67.0% RC, 106 72.5% RC, 106 76.0% RC, 1067 72% RC, 1035 74.5% RC, 106 78.5% RC, 1035 77% RC, 1086 62% RC, 1086 66.5% RC, 1080 72.5% RC, 2113 59% RC

All I-Speed glass is Spread Weave in both directions

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