

Dielectric Constant (DK) / Dissipation Factor (DF) Table

Core Data

Construction	Resin Content %	Weave Type	Offering	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)					
						5 Ghz	10 GHz	15 Ghz	20 Ghz	28 Ghz SE	28 Ghz D
1x1035	65%	LDk Spread	Standard	0.002	0.051	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.10 0.0019	2.90 0.0017
1x1035	71%	LDk Spread	Standard	0.0025	0.064	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1x1078	63%	LDk Spread	Standard	0.003	0.076	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
1x1078	68%	LDk Spread	Standard	0.0035	0.089	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1x1027/1x1035	67%	L Dk Spread	Standard	0.0035	0.089	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1x1078	71%	LDk Spread	Standard	0.004	0.102	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
2x1035	65%	LDk Spread	Standard	0.004	0.102	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
1x1035/1x1067	65%	L Dk Spread	Standard	0.004	0.102	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
1x3313	57%	LDk Spread	Standard	0.004	0.102	3.40 0.002	3.40 0.002	3.40 0.002	3.30 0.002	3.30 0.002	3.10 0.0018
2x1035	68%	LDk Spread	Standard	0.0045	0.114	3.20 0.0019	3.20 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1x1067/1x1035	68%	L Dk Spread	Standard	0.0045	0.114	3.20 0.0019	3.20 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1x3313	61%	LDk Spread	Standard	0.0045	0.114	3.30 0.0019	3.30 0.0019	3.30 0.0019	3.30 0.0019	3.20 0.0019	3.00 0.0017

Construction	Resin Content %	Weave Type	Offering	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)					
						5 Ghz	10 GHz	15 Ghz	20 Ghz	28 Ghz SE	28 Ghz D
2x1035	71%	LDk Spread	Standard	0.005	0.127	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1035/1067	72%	L Dk Spread	Standard	0.005	0.127	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1x3313	64%	LDk Spread	Standard	0.005	0.127	3.30 0.0019	3.30 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
2x1078	63%	LDk Spread	Standard	0.006	0.152	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
2x1078	68%	LDk Spread	Standard	0.007	0.178	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
2x3313	57%	LDk Spread	Standard	0.008	0.203	3.40 0.002	3.40 0.002	3.40 0.002	3.30 0.002	3.30 0.002	3.10 0.0018
3x1078	65%	LDk Spread	Standard	0.01	0.254	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017

Dielectric Constant (DK) / Dissipation Factor (DF) Table

Prepreg Data

Glass	Resin Content %	Weave Type	Offering	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)					
						5 GHz	10 GHz	15 GHz	20 GHz	28 GHz SE	28 GHz D
1027	69%	LDk Spread	Standard	0.0015	0.038	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1035	65%	LDk Spread	Standard	0.002	0.051	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
1035	71%	LDk Spread	Standard	0.0025	0.064	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1035	75%	LDk Spread	Standard	0.003	0.076	3.00 0.0019	3.00 0.0019	3.00 0.0019	3.00 0.0019	3.00 0.0019	2.80 0.0017
1067	72%	LDk Spread	Standard	0.0025	0.064	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1067	76%	LDk Spread	Standard	0.003	0.076	3.00 0.0019	3.00 0.0019	3.00 0.0019	3.00 0.0019	3.00 0.0019	2.80 0.0017
1078	63%	LDk Spread	Standard	0.003	0.076	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
1078	68%	LDk Spread	Standard	0.0035	0.089	3.20 0.0019	3.20 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1078	71%	LDk Spread	Standard	0.004	0.102	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	3.10 0.0019	2.90 0.0017
1078	74%	LDk Spread	Standard	0.0045	0.114	3.10 0.0019	3.10 0.0019	3.00 0.0019	3.00 0.0019	3.00 0.0019	2.80 0.0017
1080	75%	LDk Spread	Standard	0.0046	0.117	3.10 0.0019	3.00 0.0019	3.00 0.0019	3.30 0.0019	3.30 0.0019	3.10 0.0017
3313	61%	LDk Spread	Standard	0.0045	0.114	3.30 0.0019	3.30 0.0019	3.30 0.0019	3.30 0.0019	3.30 0.0019	3.10 0.0017

Glass	Resin Content %	Weave Type	Offering	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)					
						5 Ghz	10 GHz	15 GHz	20 GHz	28 GHz SE	28 GHz D
3313	65%	LDk Spread	Standard	0.0051	0.130	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
3313	68%	LDk Spread	Standard	0.0057	0.145	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017
2116	61%	LDk Open	Standard	0.0058	0.147	3.30 0.0019	3.30 0.0019	3.30 0.0019	3.30 0.0019	3.30 0.0019	3.10 0.0017
2116	64%	LDk Open	Standard	0.0064	0.163	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.20 0.0019	3.00 0.0017

NOTE

ALL DATA IS PRELIMINARY AND SUBJECT TO CHANGE AS ADDITIONAL DATA BECOMES AVAILABLE

Revisions:

A - Original 1/2020

"Standard" - Commonly available with the best availability.

"Alternate" - Available, but not stocked with longer lead time

"Spread" - Glass is spread in both directions

Stripline structure

Balance 100 um/4 mil dielectrics. 1 oz copper

LW 100 um/4 mil

Differential Structure

Balance 100 um/4 mil dielectrics. 1 oz copper

LW 100 um/4 mil Space 250 um/10 mil