

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

Core Data

Construction	Resin Content %	Standard/Alternate	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK) / Dissipation Factor (DF)					
					100 MHz	500 MHz	1 GHz	2 GHz	5 GHz	10 GHz
1x1080	58.0%	Standard	0.0025	0.064	3.83 0.014	3.79 0.016	3.77 0.018	3.75 0.019	3.72 0.019	3.72 0.019
1x2113	44.0%	Standard	0.0030	0.076	4.14 0.012	4.10 0.014	4.09 0.015	4.07 0.016	4.06 0.016	4.06 0.016
2x106	65.0%	Standard	0.0035	0.089	3.69 0.015	3.65 0.017	3.63 0.019	3.61 0.020	3.58 0.020	3.58 0.020
1x2116	45.0%	Standard	0.0040	0.102	4.11 0.012	4.08 0.014	4.07 0.015	4.04 0.016	4.02 0.016	4.02 0.016
1x3070	48.0%	Alternate	0.0040	0.102	4.04 0.013	4.01 0.014	3.99 0.016	3.97 0.017	3.95 0.017	3.95 0.017
106/1080	60.0%	Standard	0.0043	0.109	3.79 0.014	3.75 0.016	3.73 0.018	3.71 0.019	3.68 0.020	3.68 0.020
1x1652	42.0%	Standard	0.0050	0.127	4.18 0.012	4.15 0.013	4.14 0.015	4.12 0.015	4.10 0.016	4.10 0.016
106/2113	56.0%	Standard	0.0053	0.135	3.87 0.014	3.83 0.015	3.82 0.017	3.79 0.018	3.76 0.019	3.76 0.019
1080/2113	53.0%	Standard	0.0060	0.152	3.93 0.013	3.90 0.015	3.88 0.017	3.86 0.018	3.83 0.018	3.83 0.018
1x7628	41.0%	Standard	0.0070	0.178	4.21 0.012	4.18 0.013	4.17 0.015	4.14 0.015	4.12 0.015	4.12 0.015
2113/2116	44.0%	Alternate	0.0070	0.178	4.14 0.012	4.10 0.014	4.09 0.015	4.07 0.016	4.06 0.016	4.06 0.016
2x2116	45.0%	Standard	0.0080	0.203	4.11 0.012	4.08 0.014	4.07 0.015	4.04 0.016	4.02 0.016	4.02 0.016

Construction	Resin Content %	Standard/Alternate	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK) / Dissipation Factor (DF)					
					100 MHz	500 MHz	1 GHz	2 GHz	5 GHz	10 GHz
2x2116	52.0%	Standard	0.0095	0.241	3.95 0.013	3.92 0.015	3.90 0.017	3.88 0.017	3.85 0.018	3.85 0.018
2x1652	42.0%	Standard	0.0100	0.254	4.18 0.012	4.15 0.013	4.14 0.015	4.12 0.015	4.10 0.016	4.10 0.016
2x1080/7628	47.0%	Standard	0.0120	0.305	4.06 0.013	4.03 0.014	4.02 0.016	3.99 0.016	3.97 0.017	3.97 0.017
2x7628	41.0%	Standard	0.0140	0.356	4.21 0.012	4.18 0.013	4.17 0.015	4.14 0.015	4.12 0.015	4.12 0.015
2x7628/2116	42.0%	Standard	0.0180	0.457	4.18 0.012	4.15 0.013	4.14 0.015	4.12 0.015	4.10 0.016	4.10 0.016
3x7628	40.0%	Standard	0.0210	0.533	4.23 0.012	4.20 0.013	4.19 0.014	4.17 0.015	4.15 0.015	4.15 0.015
3x7628/1080	42.0%	Standard	0.0240	0.610	4.18 0.012	4.15 0.013	4.14 0.015	4.12 0.015	4.10 0.016	4.10 0.016
4x7628	40.0%	Standard	0.0280	0.711	4.23 0.012	4.20 0.013	4.19 0.014	4.17 0.015	4.15 0.015	4.15 0.015
4x7628/1080	42.0%	Standard	0.0310	0.787	4.18 0.012	4.15 0.013	4.14 0.015	4.12 0.015	4.10 0.016	4.10 0.016
5x7628	40.0%	Standard	0.0350	0.889	4.23 0.012	4.20 0.013	4.19 0.014	4.17 0.015	4.15 0.015	4.15 0.015

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

Prepreg Data

Glass Style	Resin Content %	Standard/Alternate	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%	Standard	0.0025	0.064	3.52 0.016	3.47 0.018	3.45 0.021	3.42 0.022	3.39 0.023	3.39 0.023
1080	65.0%	Standard	0.0033	0.084	3.69 0.015	3.65 0.017	3.63 0.019	3.61 0.020	3.58 0.021	3.58 0.021
2113	57.0%	Standard	0.0042	0.107	3.85 0.014	3.81 0.016	3.79 0.018	3.77 0.018	3.74 0.019	3.74 0.019
2116	56.0%	Standard	0.0054	0.137	3.87 0.014	3.83 0.015	3.82 0.017	3.79 0.018	3.76 0.019	3.76 0.019
1652	50.0%	Standard	0.0059	0.150	4.00 0.013	3.96 0.014	3.95 0.016	3.92 0.017	3.90 0.017	3.90 0.017
2116	62.0%	Alternate	0.0064	0.163	3.75 0.014	3.71 0.016	3.69 0.019	3.67 0.019	3.64 0.020	3.64 0.020
7628	42.0%	Standard	0.0075	0.191	4.18 0.012	4.15 0.013	4.14 0.015	4.12 0.015	4.10 0.016	4.10 0.016
7628	47.0%	Alternate	0.0084	0.213	4.06 0.013	4.03 0.014	4.02 0.016	3.99 0.016	3.97 0.017	3.97 0.017
7628	50.0%	Alternate	0.0091	0.231	4.00 0.013	3.96 0.014	3.95 0.016	3.92 0.017	3.90 0.017	3.90 0.017

NOTE

Revisions:

A-Original-4/17

B-Added Standard & Alternate construction-8/18

Standard-Commonly available with the best availability.

Alternate-Available, but not stocked with longer lead time