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

Core Data

Construction	Resin Content %	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)					
				100 MHz	500 MHz	1 Ghz	2 GHz	5 Ghz	10 Ghz
1x106	74.0%	0.002	0.051	3.91 0.0177	3.81 0.0200	3.80 0.0230	3.78 0.0240	3.72 0.0291	3.72 0.0292
1x1080	65.0%	0.003	0.076	4.03 0.0163	3.95 0.0185	3.91 0.0210	3.88 0.0222	3.82 0.0262	3.82 0.0263
1x2116	46.0%	0.004	0.102	4.45 0.0142	4.37 0.0159	4.39 0.0170	4.35 0.0182	4.32 0.0210	4.30 0.0211
1x2116	54.0%	0.005	0.127	4.21 0.0141	4.17 0.0158	4.15 0.0180	4.12 0.0187	4.06 0.0189	4.05 0.0191
1x1652	51.0%	0.006	0.152	4.28 0.0136	4.24 0.0152	4.22 0.0172	4.20 0.0179	4.14 0.0180	4.13 0.0182
1x7628	41.0%	0.007	0.178	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
1x7628	45.0%	0.008	0.203	4.48 0.0141	4.40 0.0156	4.42 0.0168	4.37 0.0181	4.35 0.0200	4.32 0.0201
2x2116	54.0%	0.010	0.254	4.21 0.0141	4.17 0.0158	4.15 0.0180	4.12 0.0187	4.06 0.0189	4.05 0.0191
2x1652	51.0%	0.012	0.305	4.28 0.0136	4.24 0.0152	4.22 0.0172	4.20 0.0179	4.14 0.0180	4.13 0.0182
2x7628	42.0%	0.014	0.356	4.55 0.0137	4.48 0.0152	4.49 0.0162	4.45 0.0177	4.42 0.0190	4.39 0.0191
2x7628	44.0%	0.015	0.381	4.50 0.0140	4.43 0.0155	4.44 0.0165	4.40 0.0171	4.37 0.0200	4.34 0.0201
2x7628	45.0%	0.016	0.406	4.48 0.0141	4.40 0.0156	4.42 0.0168	4.37 0.0181	4.35 0.0200	4.32 0.0201
2x7628/2116	41.0%	0.018	0.457	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
3x7628	41.0%	0.021	0.533	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
3x7628	45.0%	0.024	0.610	4.48 0.0141	4.40 0.0156	4.42 0.0168	4.37 0.0181	4.35 0.0200	4.32 0.0201
4x7628	41.0%	0.028	0.711	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
4x7628	44.0%	0.030	0.762	4.50 0.0140	4.43 0.0155	4.44 0.0165	4.40 0.0171	4.37 0.0200	4.34 0.0201
4x7628	45.0%	0.031	0.787	4.48 0.0141	4.40 0.0156	4.42 0.0168	4.37 0.0181	4.35 0.0200	4.32 0.0201
5x7628	41.0%	0.035	0.889	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
5x7628	44.0%	0.038	0.965	4.50 0.0140	4.43 0.0155	4.44 0.0165	4.40 0.0171	4.37 0.0200	4.34 0.0201

5x7628	45.0%	0.039	0.991	4.48 0.0141	4.40 0.0156	4.42 0.0168	4.37 0.0181	4.35 0.0200	4.32 0.0201
6x7628	41.0%	0.043	1.092	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
6x7628	45.0%	0.047	1.194	4.48 0.0141	4.40 0.0156	4.42 0.0168	4.37 0.0181	4.35 0.0200	4.32 0.0201
8x7628	41.0%	0.058	1.473	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
10x7628	44.0%	0.076	1.930	4.50 0.0140	4.43 0.0155	4.44 0.0165	4.40 0.0171	4.37 0.0200	4.34 0.0201
11x7628	44.0%	0.079	2.007	4.50 0.0140	4.43 0.0155	4.44 0.0165	4.40 0.0171	4.37 0.0200	4.34 0.0201
13x7628	41.0%	0.088	2.235	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
14x7628	41.0%	0.094	2.388	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
17x7628	41.0%	0.118	2.997	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189
18x7628	41.0%	0.125	3.175	4.58 0.0135	4.51 0.0149	4.52 0.0160	4.48 0.0164	4.45 0.0188	4.43 0.0189

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

Prepreg Data

Glass Style	Resin Content %	Thickness (inch)	Thickness (mm)	Dielectric Constant (DK)/ Dissipation Factor (DF)					
				100 MHz	500 MHz	1 Ghz	2 GHz	5 Ghz	10 Ghz
106	74.0%	0.0023	0.058	3.91 0.0177	3.81 0.0200	3.80 0.0230	3.78 0.0240	3.72 0.0291	3.72 0.0292
1080	65.0%	0.0031	0.079	4.03 0.0163	3.95 0.0185	3.91 0.0210	3.88 0.0222	3.82 0.0262	3.82 0.0263
1080	69.0%	0.0035	0.089	3.97 0.0170	3.89 0.0192	3.86 0.0220	3.84 0.0232	3.77 0.0275	3.77 0.0277
2113	57.0%	0.0040	0.102	4.20 0.0161	4.11 0.0180	4.10 0.0200	4.08 0.0210	4.03 0.0240	4.02 0.0241
2116	53.0%	0.0047	0.119	4.30 0.0145	4.21 0.0163	4.20 0.0186	4.18 0.0194	4.13 0.0225	4.12 0.0226
2116	57.0%	0.0053	0.135	4.20 0.0161	4.11 0.0180	4.10 0.0200	4.08 0.0210	4.03 0.0240	4.02 0.0241
7628	46.0%	0.0079	0.201	4.45 0.0142	4.37 0.0159	4.39 0.0170	4.35 0.0182	4.32 0.0210	4.30 0.0211
7628	51.0%	0.0087	0.221	4.35 0.0143	4.26 0.0160	4.25 0.0181	4.23 0.0189	4.18 0.0220	4.17 0.0221

IS400

Lead Free, Mid Tg Epoxy Laminate and Prepreg

Revision No: A

NOTE

Revisions:
A - Original Release - 4/17

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