

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

Core Data

| Construction | Resin Content % | Standard/Alternate | Thinckness (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 0.0140 | 3.79 0.0160 | 3.77 0.0180 | 3.75 0.0190 | 3.72 0.0190 | 3.72 0.0190 |
| 1x2113 | 44.0% | Standard | 0.0030 | 0.076 | 4.14 0.0120 | 4.10 0.0140 | 4.09 0.0150 | 4.07 0.0160 | 4.06 0.0160 | 4.06 0.0160 |
| 2x106 | 65.0% | Standard | 0.0035 | 0.089 | 3.69 0.0150 | 3.65 0.0170 | 3.63 0.0190 | 3.61 0.0200 | 3.58 0.0200 | 3.58 0.0200 |
| 1x2116 | 45.0% | Standard | 0.0040 | 0.102 | 4.11 0.0120 | 4.08 0.0140 | 4.07 0.0150 | 4.04 0.0160 | 4.02 0.0160 | 4.02 0.0160 |
| 106/1080 | 59.0% | Alternate | 0.0040 | 0.102 | 3.83 0.0140 | 3.79 0.0160 | 3.77 0.0180 | 3.75 0.0190 | 3.72 0.0190 | 3.72 0.0190 |
| 106/1080 | 60.0% | Standard | 0.0043 | 0.109 | 3.79 0.0140 | 3.75 0.0160 | 3.73 0.0180 | 3.71 0.0190 | 3.68 0.0200 | 3.68 0.0200 |
| 1x1652 | 42.0% | Standard | 0.0050 | 0.127 | 4.18 0.0120 | 4.15 0.0130 | 4.14 0.0150 | 4.12 0.0150 | 4.10 0.0160 | 4.10 0.0160 |
| 106/2113 | 56.0% | Standard | 0.0053 | 0.135 | 3.87 0.0140 | 3.83 0.0150 | 3.82 0.0170 | 3.79 0.0180 | 3.76 0.0190 | 3.76 0.0190 |
| 1080/2113 | 53.0% | Standard | 0.0060 | 0.152 | 3.93 0.0130 | 3.90 0.0150 | 3.88 0.0170 | 3.86 0.0180 | 3.83 0.0180 | 3.83 0.0180 |
| 1x7628 | 41.0% | Standard | 0.0070 | 0.178 | 4.21 0.0120 | 4.18 0.0130 | 4.17 0.0150 | 4.14 0.0150 | 4.12 0.0150 | 4.12 0.0150 |
| 2113/2116 | 44.0% | Alternate | 0.0070 | 0.178 | 4.14 0.0120 | 4.10 0.0140 | 4.09 0.0150 | 4.07 0.0160 | 4.06 0.0160 | 4.06 0.0160 |
| 2x2116 | 45.0% | Standard | 0.0080 | 0.203 | 4.11 0.0120 | 4.08 0.0140 | 4.07 0.0150 | 4.04 0.0160 | 4.02 0.0160 | 4.02 0.0160 |
| 2x2116 | 52.0% | Standard | 0.0095 | 0.241 | 3.95 0.0130 | 3.92 0.0150 | 3.90 0.0170 | 3.88 0.0170 | 3.85 0.0180 | 3.85 0.0180 |
| 2x1652 | 42.0% | Standard | 0.0100 | 0.254 | 4.18 0.0120 | 4.15 0.0130 | 4.14 0.0150 | 4.12 0.0150 | 4.10 0.0160 | 4.10 0.0160 |
| 2x1080/7628 | 47.0% | Standard | 0.0120 | 0.305 | 4.06 0.0130 | 4.03 0.0140 | 4.02 0.0160 | 3.99 0.0160 | 3.97 0.0170 | 3.97 0.0170 |
| 2x7628 | 41.0% | Standard | 0.0140 | 0.356 | 4.21 0.0120 | 4.18 0.0130 | 4.17 0.0150 | 4.14 0.0150 | 4.12 0.0150 | 4.12 0.0150 |
| 2x7628/2116 | 42.0% | Standard | 0.0180 | 0.457 | 4.18 0.0120 | 4.15 0.0130 | 4.14 0.0150 | 4.12 0.0150 | 4.10 0.0160 | 4.10 0.0160 |
| 3x7628 | 40.0% | Standard | 0.0210 | 0.533 | 4.23 0.0120 | 4.20 0.0130 | 4.19 0.0140 | 4.17 0.0150 | 4.15 0.0150 | 4.15 0.0150 |

| | | | | | | | | | | |
|-------------|-------|----------|--------|-------|----------------|----------------|----------------|----------------|----------------|----------------|
| 3x7628/1080 | 42.0% | Standard | 0.0240 | 0.610 | 4.18 0.0120 | 4.15 0.0130 | 4.14 0.0150 | 4.12 0.0150 | 4.10 0.0160 | 4.10 0.0160 |
| 4x7628 | 40.0% | Standard | 0.0280 | 0.711 | 4.23 0.0120 | 4.20 0.0130 | 4.19 0.0140 | 4.17 0.0150 | 4.15 0.0150 | 4.15 0.0150 |
| 4x7628/1080 | 42.0% | Standard | 0.0310 | 0.787 | 4.18 0.0120 | 4.15 0.0130 | 4.14 0.0150 | 4.12 0.0150 | 4.10 0.0160 | 4.10 0.0160 |
| 5x7628 | 40.0% | Standard | 0.0350 | 0.889 | 4.23 0.0120 | 4.20 0.0130 | 4.19 0.0140 | 4.17 0.0150 | 4.15 0.0150 | 4.15 0.0150 |

Prepreg 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 0.0160 | 3.47 0.0180 | 3.45 0.0210 | 3.42 0.0220 | 3.39 0.0230 | 3.39 0.0230 |
| 1080 | 65.0% | Standard | 0.0033 | 0.084 | 3.69 0.0150 | 3.65 0.0170 | 3.63 0.0190 | 3.61 0.0200 | 3.58 0.0210 | 3.58 0.0210 |
| 2113 | 57.0% | Standard | 0.0042 | 0.107 | 3.85 0.0140 | 3.81 0.0160 | 3.79 0.0180 | 3.77 0.0180 | 3.74 0.0190 | 3.74 0.0190 |
| 2116 | 56.0% | Standard | 0.0054 | 0.137 | 3.87 0.0140 | 3.83 0.0150 | 3.82 0.0170 | 3.79 0.0180 | 3.76 0.0190 | 3.76 0.0190 |
| 1652 | 50.0% | Standard | 0.0059 | 0.150 | 4.00 0.0130 | 3.96 0.0140 | 3.95 0.0160 | 3.92 0.0170 | 3.90 0.0170 | 3.90 0.0170 |
| 2116 | 62.0% | Alternate | 0.0064 | 0.163 | 3.75 0.0140 | 3.71 0.0160 | 3.69 0.0190 | 3.67 0.0190 | 3.64 0.0200 | 3.64 0.0200 |
| 7628 | 42.0% | Standard | 0.0075 | 0.191 | 4.18 0.0120 | 4.15 0.0130 | 4.14 0.0150 | 4.12 0.0150 | 4.10 0.0160 | 4.10 0.0160 |
| 7628 | 47.0% | Alternate | 0.0084 | 0.213 | 4.06 0.0130 | 4.03 0.0140 | 4.02 0.0160 | 3.99 0.0160 | 3.97 0.0170 | 3.97 0.0170 |
| 7628 | 50.0% | Alternate | 0.0091 | 0.231 | 4.00 0.0130 | 3.96 0.0140 | 3.95 0.0160 | 3.92 0.0170 | 3.90 0.0170 | 3.90 0.0170 |

NOTE

Revisions:

A-Original-4/17

B-Added Standard & Alternate construction-8/18

C - Deleted 4 mil 1x3070 Construction. Added 4 mil 106/1080 construction

Standard-Commonly available with the best availability.

Alternate-Available, but not stocked with longer lead time

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