

Based Material Line Up

SI10U(S)/SI10NB(S)

1. CORE (C-STAGE)

| Type | SPEC | Actual Thickness | | ply-up | Dk | | | Df | | |
|----------|------|------------------|-------|----------------|-------|-------|--------|-------|-------|--------|
| | | mm | mil | | 1 GHz | 5 GHz | 10 GHz | 1 GHz | 5 GHz | 10 GHz |
| Standard | 0.03 | 0.033 | 1.30 | 1X1037 | 4.50 | 4.48 | 4.47 | 0.010 | 0.011 | 0.011 |
| | 0.04 | 0.043 | 1.69 | 1x1067 | 4.51 | 4.50 | 4.48 | 0.010 | 0.011 | 0.011 |
| | 0.05 | 0.053 | 2.09 | 1x1078 | 4.69 | 4.68 | 4.66 | 0.008 | 0.009 | 0.009 |
| | 0.06 | 0.060 | 2.36 | 1x1078 | 4.58 | 4.57 | 4.55 | 0.009 | 0.010 | 0.010 |
| | 0.08 | 0.086 | 3.39 | 2x1067 | 4.51 | 4.50 | 4.48 | 0.010 | 0.011 | 0.011 |
| | 0.10 | 0.106 | 4.17 | 2x1078 | 4.69 | 4.68 | 4.66 | 0.008 | 0.009 | 0.009 |
| | 0.13 | 0.136 | 5.28 | 1078+1037+1078 | 4.63 | 4.61 | 4.59 | 0.009 | 0.010 | 0.010 |
| | 0.15 | 0.159 | 6.26 | 3x1078 | 4.69 | 4.68 | 4.66 | 0.008 | 0.009 | 0.009 |
| | 0.18 | 0.186 | 7.32 | 1067+2116+1067 | 4.68 | 4.67 | 4.65 | 0.008 | 0.009 | 0.009 |
| | 0.20 | 0.210 | 8.27 | 2x2116 | 4.79 | 4.77 | 4.76 | 0.008 | 0.009 | 0.009 |
| | 0.25 | 0.260 | 10.23 | 2116+1078+2116 | 4.70 | 4.68 | 4.67 | 0.008 | 0.009 | 0.009 |
| | 0.30 | 0.315 | 12.40 | 3x2116 | 4.79 | 4.77 | 4.76 | 0.008 | 0.009 | 0.009 |
| | 0.40 | 0.420 | 16.54 | 4x2116 | 4.79 | 4.77 | 4.76 | 0.008 | 0.009 | 0.009 |
| | 0.50 | 0.510 | 20.08 | 5x2116 | 4.79 | 4.77 | 4.76 | 0.008 | 0.009 | 0.009 |
| | 0.60 | 0.610 | 24.02 | 6x2116 | 4.79 | 4.77 | 4.76 | 0.008 | 0.009 | 0.009 |
| | 0.70 | 0.710 | 27.95 | 7x2116 | 4.79 | 4.77 | 4.76 | 0.008 | 0.009 | 0.009 |
| | 0.80 | 0.810 | 31.89 | 8x2116 | 4.79 | 4.77 | 4.76 | 0.008 | 0.009 | 0.009 |
| M | 0.04 | 0.043 | 1.69 | 2x1017 | 4.40 | 4.39 | 4.37 | 0.011 | 0.012 | 0.012 |
| | 0.05 | 0.052 | 2.05 | 2x1027 | 4.50 | 4.48 | 4.47 | 0.010 | 0.011 | 0.011 |

Based Material Line Up

| | | | | | | | | | | |
|---|------|-------|------|--------|------|------|------|-------|-------|-------|
| | 0.06 | 0.060 | 2.36 | 2x1037 | 4.50 | 4.48 | 4.47 | 0.010 | 0.011 | 0.011 |
| | 0.20 | 0.212 | 8.35 | 4X1078 | 4.69 | 4.68 | 4.66 | 0.008 | 0.009 | 0.009 |
| H | 0.03 | 0.033 | 1.30 | 1X1024 | 4.50 | 4.48 | 4.47 | 0.010 | 0.011 | 0.011 |
| | 0.04 | 0.043 | 1.69 | 2X1015 | 4.57 | 4.56 | 4.54 | 0.009 | 0.010 | 0.010 |
| | 0.05 | 0.052 | 2.05 | 2X1024 | 4.69 | 4.68 | 4.66 | 0.008 | 0.009 | 0.009 |
| | 0.06 | 0.066 | 2.60 | 2X1030 | 4.70 | 4.68 | 4.67 | 0.008 | 0.009 | 0.009 |

Remark:

1)Type M: Multi-ply; H: High density glass fabric;

2. PREPREG (B-STAGE)

| Glass style | RC (%) | Nominal Thickness | | Dk | | | Df | | |
|-------------|--------|-------------------|------|------|------|-------|-------|-------|--------|
| | | mm | mil | 1GHz | 5GHz | 10GHz | 1 GHz | 5 GHz | 10 GHz |
| 1078 | 64 | 0.070 | 2.76 | 4.48 | 4.46 | 4.45 | 0.010 | 0.011 | 0.011 |
| 1078 | 59 | 0.060 | 2.36 | 4.60 | 4.59 | 4.57 | 0.009 | 0.010 | 0.010 |
| 1067 | 72 | 0.060 | 2.36 | 4.33 | 4.31 | 4.29 | 0.012 | 0.013 | 0.013 |
| 1067 | 67 | 0.050 | 1.97 | 4.40 | 4.39 | 4.37 | 0.011 | 0.012 | 0.012 |
| 1037 | 75 | 0.050 | 1.97 | 4.31 | 4.29 | 4.28 | 0.012 | 0.013 | 0.013 |
| 1037 | 69 | 0.040 | 1.57 | 4.40 | 4.39 | 4.37 | 0.011 | 0.012 | 0.012 |
| 1027 | 73 | 0.040 | 1.57 | 4.33 | 4.31 | 4.29 | 0.012 | 0.013 | 0.013 |
| 1027 | 65 | 0.030 | 1.18 | 4.48 | 4.46 | 4.45 | 0.010 | 0.011 | 0.011 |
| 1017 | 76 | 0.030 | 1.18 | 4.31 | 4.29 | 4.28 | 0.012 | 0.013 | 0.013 |
| 1017 | 72 | 0.025 | 1.00 | 4.33 | 4.31 | 4.29 | 0.012 | 0.013 | 0.013 |

Based Material Line Up



3. REMARK

- 1) Test by SPDR method
- 2) The data above show actual values and are not guaranteed.
- 3) Last update: Dec, 2020