

Based Material Line Up

S1000H/S1000HB

1. CORE (C-STAGE)

| Thickness | | ply-up | RC (%) | Dk | | | | Df | | | |
|-----------|-------|-------------|--------|-------|-------|-------|--------|-------|-------|-------|--------|
| mm | mil | | | 1 GHz | 3 GHz | 5 GHz | 10 GHz | 1 GHz | 3 GHz | 5 GHz | 10 GHz |
| 0.050 | 2.00 | 1x106 | 72 | 4.11 | 4.03 | 4.00 | 4.00 | 0.020 | 0.020 | 0.020 | 0.021 |
| 0.063 | 2.52 | 1x1065 | 67 | 4.23 | 4.15 | 4.13 | 4.13 | 0.019 | 0.019 | 0.019 | 0.020 |
| 0.076 | 3.04 | 1x1080 | 66 | 4.26 | 4.18 | 4.16 | 4.15 | 0.019 | 0.019 | 0.019 | 0.020 |
| 0.090 | 3.60 | 1X3313 | 53 | 4.57 | 4.50 | 4.49 | 4.48 | 0.016 | 0.017 | 0.017 | 0.018 |
| 0.100 | 4.00 | 1x3313 | 56 | 4.50 | 4.43 | 4.41 | 4.41 | 0.017 | 0.017 | 0.018 | 0.018 |
| 0.110 | 4.40 | 1x2116 | 51 | 4.62 | 4.55 | 4.54 | 4.53 | 0.016 | 0.016 | 0.017 | 0.017 |
| 0.125 | 5.00 | 1x2116 | 56 | 4.50 | 4.43 | 4.41 | 4.41 | 0.017 | 0.017 | 0.018 | 0.018 |
| 0.150 | 6.00 | 1x1506 | 45 | 4.77 | 4.70 | 4.69 | 4.69 | 0.015 | 0.015 | 0.016 | 0.016 |
| 0.156 | 6.24 | 2x1080 | 65 | 4.28 | 4.20 | 4.18 | 4.18 | 0.019 | 0.019 | 0.019 | 0.020 |
| 0.200 | 8.00 | 1x7628 | 46 | 4.74 | 4.67 | 4.67 | 4.66 | 0.015 | 0.016 | 0.016 | 0.016 |
| 0.240 | 9.60 | 2x2116 | 54 | 4.55 | 4.48 | 4.46 | 4.46 | 0.017 | 0.017 | 0.017 | 0.018 |
| 0.300 | 12.00 | 2x1506 | 45 | 4.77 | 4.70 | 4.69 | 4.69 | 0.015 | 0.015 | 0.016 | 0.016 |
| 0.350 | 14.00 | 2x7628 | 42 | 4.84 | 4.77 | 4.77 | 4.76 | 0.014 | 0.015 | 0.015 | 0.016 |
| 0.400 | 16.00 | 2x7628 | 46 | 4.74 | 4.67 | 4.67 | 4.66 | 0.015 | 0.016 | 0.016 | 0.016 |
| 0.450 | 18.00 | 2X7628+1080 | 47 | 4.72 | 4.65 | 4.64 | 4.63 | 0.015 | 0.016 | 0.016 | 0.016 |
| 0.500 | 20.00 | 2X7628+2116 | 47 | 4.72 | 4.65 | 4.64 | 4.63 | 0.015 | 0.016 | 0.016 | 0.016 |
| 0.600 | 24.00 | 3X7628 | 46 | 4.74 | 4.67 | 4.67 | 4.66 | 0.015 | 0.016 | 0.016 | 0.016 |
| 0.800 | 32.00 | 4X7628 | 46 | 4.74 | 4.67 | 4.67 | 4.66 | 0.015 | 0.016 | 0.016 | 0.016 |
| 1.000 | 40.00 | 5X7628 | 46 | 4.74 | 4.67 | 4.67 | 4.66 | 0.015 | 0.016 | 0.016 | 0.016 |

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| | | | | | | | | | | | |
|-------|-------|--------|----|------|------|------|------|-------|-------|-------|-------|
| 1.090 | 43.00 | 6X7628 | 43 | 4.81 | 4.74 | 4.74 | 4.73 | 0.014 | 0.015 | 0.015 | 0.016 |
| 1.200 | 47.00 | 6X7628 | 46 | 4.74 | 4.67 | 4.67 | 4.66 | 0.015 | 0.016 | 0.016 | 0.016 |

2. PREPREG (B-STAGE)

| Glass style | RC (%) Nominal | Thickness | | Dk | | | | Df | | | |
|-------------|-------------------|-----------|------|------|------|------|-------|-------|-------|-------|--------|
| | | mm | mil | 1GHz | 3GHz | 5GHz | 10GHz | 1 GHz | 3 GHz | 5 GHz | 10 GHz |
| 7628 | 43* | 0.185 | 7.28 | 4.81 | 4.74 | 4.74 | 4.73 | 0.014 | 0.015 | 0.015 | 0.016 |
| 7628 | 46 | 0.195 | 7.68 | 4.74 | 4.68 | 4.66 | 4.66 | 0.015 | 0.016 | 0.016 | 0.016 |
| 7628 | 48 | 0.205 | 8.07 | 4.70 | 4.63 | 4.61 | 4.61 | 0.015 | 0.016 | 0.016 | 0.017 |
| 7628 | 50 | 0.215 | 8.46 | 4.65 | 4.58 | 4.57 | 4.57 | 0.016 | 0.016 | 0.017 | 0.017 |
| 1506 | 48 | 0.163 | 6.42 | 4.70 | 4.63 | 4.61 | 4.61 | 0.015 | 0.016 | 0.016 | 0.017 |
| 1506 | 50 | 0.170 | 6.69 | 4.65 | 4.58 | 4.57 | 4.57 | 0.016 | 0.016 | 0.017 | 0.017 |
| 1506 | 52 | 0.180 | 7.09 | 4.59 | 4.52 | 4.51 | 4.50 | 0.016 | 0.016 | 0.017 | 0.017 |
| 2116 | 52* | 0.113 | 4.45 | 4.59 | 4.52 | 4.51 | 4.50 | 0.016 | 0.016 | 0.017 | 0.017 |
| 2116 | 53 | 0.116 | 4.57 | 4.57 | 4.50 | 4.49 | 4.48 | 0.016 | 0.017 | 0.017 | 0.018 |
| 2116 | 55 | 0.123 | 4.84 | 4.53 | 4.45 | 4.43 | 4.43 | 0.017 | 0.017 | 0.018 | 0.018 |
| 2116 | 58 | 0.133 | 5.24 | 4.45 | 4.38 | 4.36 | 4.36 | 0.017 | 0.018 | 0.018 | 0.018 |
| 3313 | 57 | 0.100 | 3.94 | 4.48 | 4.41 | 4.39 | 4.39 | 0.017 | 0.018 | 0.018 | 0.018 |
| 1080 | 65 | 0.072 | 2.83 | 4.29 | 4.21 | 4.19 | 4.18 | 0.019 | 0.019 | 0.019 | 0.020 |
| 1080 | 68 | 0.078 | 3.07 | 4.21 | 4.13 | 4.11 | 4.11 | 0.020 | 0.019 | 0.020 | 0.020 |
| 106 | 73 | 0.050 | 1.97 | 4.09 | 4.01 | 3.97 | 3.97 | 0.020 | 0.020 | 0.020 | 0.021 |

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3. REMARK

- 1) Test by SPDR method
- 2) The data above show actual values and are not guaranteed.
- 3) RC* is not common type for reference.
- 4) Last update: September, 2019