

### 1) CORE (KB-6160)

| Thickness<br>(mil)±10% | Thickness<br>(mm)±10% | Layup         | Dk±0.2 |      |      |       | Df±10% |       |       |       |
|------------------------|-----------------------|---------------|--------|------|------|-------|--------|-------|-------|-------|
|                        |                       |               | 1GHz   | 2GHz | 5GHz | 10GHz | 1GHz   | 2GHz  | 5GHz  | 10GHz |
| 3.0                    | 0.076                 | 1080*1        | 4.0    | 3.9  | 3.9  | 3.8   | 0.018  | 0.018 | 0.019 | 0.019 |
| 3.5                    | 0.089                 | 3313*1        | 4.2    | 4.2  | 4.1  | 4.1   | 0.015  | 0.015 | 0.016 | 0.016 |
| 4.0                    | 0.102                 | 3313*1        | 4.3    | 4.2  | 4.2  | 4.2   | 0.016  | 0.016 | 0.017 | 0.017 |
| 4.5                    | 0.114                 | 2116*1        | 4.3    | 4.2  | 4.2  | 4.1   | 0.015  | 0.015 | 0.016 | 0.016 |
| 5.0                    | 0.127                 | 2116*1        | 4.2    | 4.2  | 4.1  | 4.1   | 0.015  | 0.016 | 0.016 | 0.017 |
| 5.5                    | 0.140                 | 2116*1        | 4.1    | 4.1  | 4.0  | 4.0   | 0.016  | 0.016 | 0.017 | 0.017 |
| 6.0                    | 0.152                 | 1506*1        | 4.4    | 4.4  | 4.3  | 4.3   | 0.014  | 0.015 | 0.015 | 0.016 |
| 7.5                    | 0.191                 | 7628*1        | 4.4    | 4.4  | 4.4  | 4.3   | 0.013  | 0.014 | 0.015 | 0.015 |
| 8.0                    | 0.203                 | 7628*1        | 4.4    | 4.4  | 4.3  | 4.3   | 0.013  | 0.014 | 0.015 | 0.015 |
| 10.0                   | 0.254                 | 2116*2        | 4.2    | 4.2  | 4.1  | 4.1   | 0.015  | 0.016 | 0.017 | 0.017 |
| 12.0                   | 0.305                 | 1506*2        | 4.4    | 4.4  | 4.3  | 4.3   | 0.014  | 0.015 | 0.015 | 0.016 |
| 15.0                   | 0.381                 | 7628*2        | 4.4    | 4.4  | 4.3  | 4.3   | 0.013  | 0.014 | 0.015 | 0.015 |
| 18.0                   | 0.457                 | 1506*3        | 4.4    | 4.4  | 4.4  | 4.3   | 0.014  | 0.015 | 0.016 | 0.016 |
| 21.0                   | 0.533                 | 7628*3        | 4.5    | 4.4  | 4.4  | 4.4   | 0.013  | 0.014 | 0.015 | 0.015 |
| 25.0                   | 0.635                 | 7628*2+2116*2 | 4.4    | 4.4  | 4.4  | 4.3   | 0.013  | 0.014 | 0.015 | 0.015 |
| 30.0                   | 0.762                 | 7628*4        | 4.4    | 4.4  | 4.3  | 4.3   | 0.013  | 0.014 | 0.015 | 0.015 |
| 35.0                   | 0.889                 | 7628*5        | 4.5    | 4.5  | 4.4  | 4.4   | 0.013  | 0.014 | 0.015 | 0.015 |
| 40.0                   | 1.016                 | 7628*5        | 4.5    | 4.4  | 4.4  | 4.4   | 0.014  | 0.014 | 0.015 | 0.015 |
| 47.0                   | 1.194                 | 7628*6        | 4.5    | 4.5  | 4.5  | 4.4   | 0.013  | 0.013 | 0.014 | 0.014 |
| 59.0                   | 1.499                 | 7628*8        | 4.5    | 4.5  | 4.5  | 4.4   | 0.013  | 0.013 | 0.014 | 0.014 |

### 1) PREPREG (KB-6060)

| Glass style | Thickness<br>(mil)±10% | Thickness<br>(mm)±10% | RC% | Dk±0.2 |      |      |       | Df±10% |       |       |       |
|-------------|------------------------|-----------------------|-----|--------|------|------|-------|--------|-------|-------|-------|
|             |                        |                       |     | 1GHz   | 2GHz | 5GHz | 10GHz | 1GHz   | 2GHz  | 5GHz  | 10GHz |
| 1080        | 3.10                   | 0.079                 | 63  | 3.9    | 3.8  | 3.8  | 3.7   | 0.018  | 0.018 | 0.019 | 0.019 |
|             | 3.30                   | 0.084                 | 65  | 3.9    | 3.8  | 3.7  | 3.7   | 0.018  | 0.018 | 0.019 | 0.019 |
|             | 3.70                   | 0.094                 | 68  | 3.8    | 3.8  | 3.7  | 3.7   | 0.019  | 0.019 | 0.020 | 0.020 |
|             | 4.00                   | 0.102                 | 70  | 3.8    | 3.7  | 3.6  | 3.6   | 0.019  | 0.019 | 0.020 | 0.020 |
| 3313        | 3.60                   | 0.091                 | 50  | 4.2    | 4.1  | 4.1  | 4.1   | 0.015  | 0.015 | 0.016 | 0.016 |
|             | 3.80                   | 0.097                 | 52  | 4.1    | 4.1  | 4.1  | 4.0   | 0.015  | 0.015 | 0.016 | 0.016 |
|             | 4.10                   | 0.104                 | 55  | 4.1    | 4.1  | 4.0  | 4.0   | 0.016  | 0.016 | 0.017 | 0.017 |
|             | 4.50                   | 0.114                 | 58  | 4.0    | 4.0  | 4.0  | 3.9   | 0.016  | 0.016 | 0.017 | 0.017 |
| 2116        | 4.70                   | 0.119                 | 50  | 4.2    | 4.2  | 4.2  | 4.1   | 0.015  | 0.015 | 0.016 | 0.016 |
|             | 5.00                   | 0.127                 | 53  | 4.2    | 4.2  | 4.1  | 4.1   | 0.015  | 0.015 | 0.016 | 0.016 |
|             | 5.30                   | 0.135                 | 55  | 4.1    | 4.1  | 4.1  | 4.0   | 0.016  | 0.016 | 0.017 | 0.017 |
|             | 5.60                   | 0.142                 | 57  | 4.0    | 4.0  | 4.0  | 3.9   | 0.016  | 0.016 | 0.017 | 0.017 |
| 1506        | 6.40                   | 0.163                 | 45  | 4.4    | 4.3  | 4.3  | 4.3   | 0.013  | 0.014 | 0.015 | 0.015 |
|             | 6.60                   | 0.168                 | 46  | 4.4    | 4.3  | 4.3  | 4.3   | 0.014  | 0.014 | 0.015 | 0.015 |
|             | 6.90                   | 0.175                 | 48  | 4.3    | 4.3  | 4.2  | 4.2   | 0.014  | 0.014 | 0.015 | 0.015 |
|             | 7.30                   | 0.185                 | 50  | 4.3    | 4.2  | 4.2  | 4.2   | 0.014  | 0.014 | 0.015 | 0.015 |
| 7628        | 7.80                   | 0.198                 | 43  | 4.4    | 4.4  | 4.4  | 4.3   | 0.013  | 0.014 | 0.015 | 0.015 |
|             | 8.20                   | 0.208                 | 45  | 4.4    | 4.3  | 4.3  | 4.3   | 0.013  | 0.014 | 0.015 | 0.015 |
|             | 8.60                   | 0.218                 | 47  | 4.3    | 4.3  | 4.3  | 4.2   | 0.014  | 0.015 | 0.016 | 0.016 |
|             | 9.30                   | 0.236                 | 50  | 4.3    | 4.3  | 4.2  | 4.2   | 0.015  | 0.015 | 0.016 | 0.016 |