

## 产品编号 (Item No) : NYHP-7300

### Very Low Loss & Low Z-axis CTE

#### 特点:

- 低介电常数(Dk 2.98@10GHz)
- 介质损耗(Df 0.0025@10GHz)
- Tg >200℃ 高耐热性
- 优异通孔可靠性及 PCB 加工性
- 低吸水性

#### 应用领域:

- 基站天线/CPE 天线
- 射频器件

#### FEATURES:

- Low Dk (Dk 2.98@10GHz)
- Low Df (Df 0.0025@10GHz)
- Tg >200℃ and high thermostability
- Superior PTH reliability and easy PCB processing
- Low moisture absorption

#### APPLICATIONS:

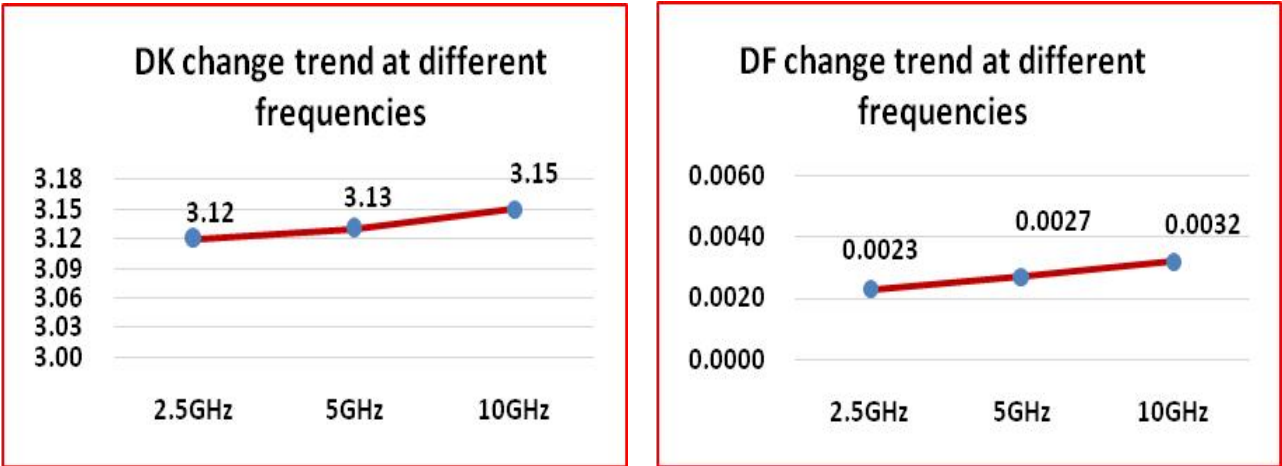
- Base Station Antenna/CPE Antenna
- RF Passive Components

### NYHP-7300 基板产品规格表 Specification Sheet for Laminate

| NYHP-7300 覆铜板<br>NYHP-7300 Laminate                                     |                      | 单位Units                       | 典型值<br>Typical Value | 条件<br>Condition | 测试方法<br>Test Method        |
|-------------------------------------------------------------------------|----------------------|-------------------------------|----------------------|-----------------|----------------------------|
|                                                                         |                      | Metric(English)               | 1.524mm CCL          |                 | IPC-TM-650                 |
| 1. 抗剥强度Peel Strength, As received                                       |                      | N/mm(lb/inch)                 | >0.7 (4)             | 1oz HVLP        | 2.4.8                      |
| 2. 体积电阻 Volume Resistivity, 恒温恒湿C-96/35/90                              |                      | MΩ-cm, Minimum                | 4×10 <sup>8</sup>    | COND A          | 2.5.17.1                   |
| 3. 表面电阻 Surface Resistivity, 恒温恒湿C-96/35/90                             |                      | MΩ, Minimum                   | 2.1×10 <sup>8</sup>  | COND A          | 2.5.17.1                   |
| 4. 吸水率 Moisture Absorption                                              |                      | % Maximum                     | 0.14                 |                 | 2.6.2.1                    |
| 5. 介电常数 Permittivity (Laminate & Prepreg as laminated)                  |                      | Maximum                       | 2.98 ± 0.05          | 10 GHz/23℃      | 2.5.5.5C                   |
| 6. 介质损耗 Loss Tangent (Laminate & Prepreg as laminated)                  |                      | Maximum                       | 0.0025               | 10 GHz/23℃      | 2.5.5.5C                   |
| 7. TCDK                                                                 |                      | PPM/℃                         | 45                   | -50℃-150℃       | 2.5.5.5                    |
| 8. 弯曲强度 Flexural Strength, A. 纵向 Length direction B. 横向 Cross direction |                      | N/mm <sup>2</sup> , minimum   | 210<br>155           | RT              | ASTM D790                  |
| 9. 热应力冲击 Thermal Stress A. 未蚀刻 Unetched B. 蚀刻 Etched                    |                      | 10 sec at 288℃                | Pass<br>Pass         | 288℃            | 2.4.13.1                   |
| 10. 燃烧性 Flammability (Laminate & Prepreg as laminated)                  |                      | Rating                        | V-0                  |                 | UL94<br>(UL File: E213990) |
| 11. 玻璃态转化温度 Glass Transition Temperature                                |                      | ℃                             | >200                 | DMA             | 2.4.24                     |
| 12. 热分解温度 Decomposition Temperature                                     |                      | ℃                             | 400                  |                 | TD<br>(5% wt loss)         |
| 13. CTE膨胀系数                                                             | X/Y Axis (50-125℃)   | Ppm/℃                         | 17/18                | <Tg,TMA         | 2.4.24                     |
|                                                                         | Z-Axis (50 to 280 ℃) | %                             | 1.6                  |                 | 2.4.24                     |
| 14. 耐热性(除去铜箔) Thermal Resistance (Copper removed) A.T260 B.T288 C.T300  |                      | Minutes<br>Minutes<br>Minutes | >120<br>> 60<br>> 60 |                 | 2.4.24.1                   |
| 15. 耐CAF性能 CAF Resistance                                               |                      | Pass/Fail                     | Pass                 | AABUS           | 2.6.25                     |
| 16. PIM                                                                 |                      | dBc                           | ≤-158                |                 | 800/1800/2600 MHz          |

\*AABUS = 供需双方商定 As agreed upon between user and supplier.

NYHP-7300 Dielectric properties at different frequencies (SPDR, 30mil substrate)



板材厚度与公差 The thickness & Tolerance

| 型号(Model) | 厚度 Thickness<br>(mm) | 厚度 Thickness<br>(inch) | 公差 Tolerance<br>(mm) |
|-----------|----------------------|------------------------|----------------------|
| NYHP-7300 | 0.508                | 0.02                   | ±0.038               |
|           | 0.762                | 0.03                   | ±0.050               |
|           | 1.016                | 0.04                   | ±0.075               |

板材尺寸 Standard Size

| 型号(Model) | 英寸/inch | 毫米/mm     |
|-----------|---------|-----------|
| NYHP-7300 | 36×48   | 914×1219  |
|           | 40×48   | 1016×1219 |
|           | 42×48   | 1067×1219 |

注：可以根据客户要求的尺寸开 PNL 出货。

Remark: Other size could be available upon request.

铜箔 Copper Foil

| 型号(Model) | HVLP |
|-----------|------|
| NYHP-7300 | Hoz  |
|           | 1oz  |

注： Other copper spec could be available upon request