**南亚新材料科技股份有限公司**
**NOUYA** NANYA NEW MATERIAL TECHNOLOGY CO.,LTD.

# 产品编号（Item No）： NYHP-7003C

## 型号（Model）： NYHP-7003C

### High Frequency Very Low Loss Laminate

**特点:**

- 低介电常数(Dk 3.38@10 GHz)
- 介质损耗(Df 0.0030@10 GHz)
- Tg>200℃无铅兼容板材
- 优异通孔可靠性及 PCB 加工性
- 低吸水率

**FEATURES:**

- Low Dk (Dk 3.38@10 GHz )
- Low Df (Df 0.0030@10 GHz)
- Tg>200℃, Lead-free compatible
- Superior PTH reliability and easy PCB processing
- Low moisture absorption

**应用领域:**

- 天线
- 微波/无线通讯

**APPLICATIONS:**

- Antenna
- Microwave/Wireless Communication

## NYHP-7003C 基板产品规格表 Specification Sheet for Laminate

| **NYHP-7003C 覆铜板**<br>**NYHP-7003C Type Laminate** | **单位Units** | **典型值 Typical Value** | **条件 Condition** | **测试方法 Test Method** |
|---|---|---|---|---|
| | **Metric(English)** | **1.524mm CCL** | | **IPC TM 650** |
| 1. 抗剥强度Peel Strength, As received | N/mm(lb/inch), | ＞1.0 (5.7) | 1oz HTE | 2.4.8 |
| 2. 体积电阻 Volume Resistivity, | MΩ-cm, Minimum | $1.8\times10^{10}$ | COND A | 2.5.17.1 |
| 3. 表面电阻 Surface Resistivity, | MΩ, Minimum | $4.3\times10^{9}$ | COND A | 2.5.17.1 |
| 4. 吸水率 Moisture Absorption | % maximum | 0.06 | | 2.6.2.1 |
| 5. 介电常数 Permittivity (Laminate & Prepreg as laminated) | --- maximum | 3.38 | 10 GHz/23℃ | 2.5.5.5 |
| 6. 介质损耗 Loss Tangent (Laminate & Prepreg as laminated) | --- maximum | 0.0030 | 10 GHz/23℃ | 2.5.5.5 |
| 7. TCDK | PPM/℃ | 48 | -50℃-150℃ | 2.5.5.5 |
| 8. 弯曲强度 Flexural Strength,<br>A. 纵向 Length direction<br>B. 横向 Cross direction | N/mm$^2$, minimum | 220<br>140 | RT | 2.4.4 |
| 9. 热应力冲击 Thermal Stress<br>A. 未蚀刻 Unetched<br>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 (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 (5% wt loss) |
| 13. 膨胀系数Z-CTE<br>A. 50 to 280 ℃ | PPM/℃ | 50 | | 2.4.24 |
| 14. 耐热性(除去铜箔) Thermal Resistance (Copper removed)<br>A.T260<br>B.T288<br>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. 导热系数 Thermal Conductivity | W/m•℃ | 0.69 | | ASTM D5470 |

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