

Mid-Loss & Halogen-free & Excellent Thermal Resistance  
NY3170M/NY3170MP

特点 FEATURES:

- 高TG无卤无铅兼容 High TG Halogen-free and Lead-free compatible
- 低Z-CTE值 Low Z-axis CTE
- 优秀的尺寸安定性 Excellent Dimension Stability
- 低的介电损耗和介电常数 (Low Dk 4.10@10GHz and Low Df 0.0085@10GHz)

应用领域 APPLICATIONS:

- 路由器 Router
- 服务器 Server
- 基站 Base Station
- 存储 Storage
- 高性能笔记本 High-performance Notebook

NY3170M基板典型性能 Typical Properties for NY3170M Laminate

| 属性<br>Property    | 项目<br>Item                            |     | 测试方法<br>IPC-TM-650 | 测试条件<br>Test Condition | 单位<br>Unit  | 典型值<br>Typical Value |                     |
|-------------------|---------------------------------------|-----|--------------------|------------------------|-------------|----------------------|---------------------|
| 热性能<br>Thermal    | 玻璃态转换温度 Tg                            |     | 2.4.25             | DSC                    | ℃           | \                    |                     |
|                   |                                       |     | 2.4.24             | TMA                    | ℃           | 190                  |                     |
|                   |                                       |     | 2.4.24.4           | DMA                    | ℃           | 250                  |                     |
|                   | X/Y轴热膨胀系数CTE,X/Y-axis (2116×12)       |     | 2.4.24.5           | < Tg,TMA               | PPM/℃       | 16\17                |                     |
|                   | Z轴热膨胀系数<br>Z-axis Expansion (2116×12) |     | 2.4.24             | < Tg,TMA               | PPM/℃       | 40                   |                     |
|                   |                                       |     |                    | > Tg,TMA               | PPM/℃       | 210                  |                     |
|                   |                                       |     | 2.4.24             | 50~260℃                | %           | 2.3                  |                     |
|                   | 热裂解温度 Td                              |     | 2.4.24.6           | TGA(5%W.L.)            | ℃           | 385                  |                     |
|                   | 耐热性 T288                              |     | 2.4.24.1           | Clad                   | Min         | > 60                 |                     |
| Etched            |                                       |     |                    | Min                    | > 60        |                      |                     |
| 电性能<br>Electrical | 介电常数 Dk<br>(R/C:55%/70%)              |     | 1MHz               | 2.5.5.9                | C-24/23/50  | -                    | 3.90\3.60           |
|                   |                                       |     | 1GHz               |                        |             |                      | 3.87\3.57           |
|                   |                                       |     | 10GHz              |                        |             |                      | SPDR method         |
|                   | 介质损耗 Df<br>(R/C:55%/70%)              |     | 1MHz               | 2.5.5.9                | C-24/23/50  | -                    | 0.0076\0.0082       |
|                   |                                       |     | 1GHz               |                        |             |                      | 0.0078\0.0084       |
|                   |                                       |     | 10GHz              |                        |             |                      | SPDR method         |
|                   | 体积电阻 Volume Resistivity               |     |                    | 2.5.17.1               | C-96/35/90  | MΩ-cm                | 2.4×10 <sup>9</sup> |
|                   | 表面电阻 Surface Resistivity              |     |                    |                        |             | MΩ                   | 1.2×10 <sup>8</sup> |
| 物理性能<br>Physical  | 吸水率 Water Absorption                  |     | 2.6.2.1            | E-1/105+D-24/23        | %           | 0.12                 |                     |
|                   | 剥离强度 Peel Strength (HTE)              | 1oz | 2.4.8              | As Received            | N/mm        | 1.0                  |                     |
|                   | 剥离强度 Peel Strength (RTF)              | 1oz |                    |                        |             | 0.8                  |                     |
|                   | 剥离强度 Peel Strength (HVLP)             | 1oz |                    |                        |             | \                    |                     |
|                   | 弯曲强度<br>Flexural Strength             |     | Warp               | 2.4.4                  | As Received | N/mm <sup>2</sup>    | 490                 |
|                   |                                       |     | Fill               |                        |             |                      | 420                 |
|                   | 耐燃性 Flame Resistance                  |     |                    | UL-94                  | A&E-4/125   | -                    | V-0                 |