

Y-206BSM & Y-206BSMP

Black ,Low CTE,High modulus Laminate&Prepreg for IC Packages

产品特点

- 低膨胀、低收缩，有效降低 IC 封装基板翘曲
- 高模量(高弹性率)
- 优异的耐热性
- 无卤、高 Tg185℃
- 黑色和良好的光遮蔽性能
- 优异的厚度均匀性

应用领域：

CSP、BGA、FC-PKG 等封装用基板。

Key Features:

- Low CTE and low shrinkage, effective to reduced the warpage of substrate for IC PKG
- High modulus,
- Excellent heat resistance
- Halogen-free and Tg185℃
- Black and good light blocking
- Excellent uniformity of thickness

Applications:

Substrates for CSP、BGA、FC-PKG etc.

General properties

| Property | Item | IPC-TM-650 | Test Condition | Units | Typical value |
|--|---|------------|------------------|-------|-------------------|
| 热性能 Thermal | 玻璃化转变温度 Glass Transition Temperature | 2.4.24.4 | DMA | ℃ | 185 |
| | X,Y 轴方向膨胀系数 X,Y-CTE | 2.4.24.5 | TMA | ppm/℃ | 6~8 |
| | Z 轴方向膨胀系数 Z axis-CTE | 2.4.24 | TMA, Before TG | ppm/℃ | 25 |
| | | | TMA, After TG | ppm/℃ | 98 |
| | | | 50~260℃ | % | 1.7 |
| | 288℃ 分层时间 T288 | 2.4.24.1 | Clad | min | >60 |
| | | | Etched | min | >60 |
| | 288℃ 热冲击 Thermal stress | 2.6.8 | 288℃, solder dip | S | >300 |
| 热失重(weight loss 5%) Decomposition temperature | 2.4.24.6 | TGA | ℃ | 380 | |
| 电性能 Electrical | 体积电阻 Volume Resistivity | 2.5.17.1 | C-96/35/90 | MΩ-cm | >10 ¹⁰ |
| | 表面电阻 Surface Resistivity | 2.5.17.1 | C-96/35/90 | MΩ | >10 ¹⁰ |

| | | | | | |
|------------------|--|----------|-------------------|------------|-------------------|
| | Dk (RC50%) | 2.5.5.9 | 1GHz;C-24/23/50 | / | 5.0 |
| | Df (RC50%) | 2.5.5.9 | 1GHz;C-24/23/50 | / | 0.019 |
| 物理性能 Physical | 红光透过性 Red light permeability | / | Internal standard | % | 0 |
| | 弯曲强度 Flexural Strength | LW CW | 2.4.4 | A | MPa 560 510 |
| | 弯曲模量 Flexural modulus | | JB/T 6544-1993 | A | GPa 29 |
| | 杨氏模量 Young's Modulus | | | A | GPa 29 |
| | 剥离强度 Peel Strength (Hoz Copper Foil) | | 2.4.8 | 288°C/10s | lb/inch 5.1 |
| | 热导率 Thermal conductivity | | ASTM-D5470 | C-96/35/90 | W/(m*k) 0.76 |
| | 吸水率 Moisture Absorption | | 2.6.2.1 | D-24/23 | % 0.08 |

Specimen thickness: 0.40mm or 0.80mm.

Test Method is according to IPC TM-650 or National Standard Test Method.

The data above is only for reference, and the actual data will have deviation, according to varieties of test equipment and method