

Lead-Free/Tg 170/Low CTE

特性 (Feature)

- 无铅 Tg>170°C
Lead-free DSC Tg>170°C
- 优良的耐热性
Excellent thermal reliability
- 低的Z轴热膨胀系数
Low Z-CTE
- 良好的耐CAF性能
Anti-CAF capability

应用 (Application)

- 消费电子
Consumer electronics
- 汽车电子
Automotive electronics
- 仪器仪表
Instruments
- 电源
Power Supplier

板材性能 (Laminate Properties)

| Test Item 测试项目 | | Test Method (IPC-TM-650) 测试方法 | Test Condition 处理条件 | Unit 单位 | Typical Value 典型值 | |
|-------------------------|------------------------------------|-------------------------------------|-------------------------|-------------------|----------------------|-------|
| Thermal 热性能 | Thermal Stress 热应力 | 2.4.13.1 | Float 288 °C / Unetched | Sec | ≥240 | |
| | Glass Transition (Tg) 玻璃化转变温度 | 2.4.25 | DSC | °C | 175 | |
| | | 2.4.24.4 | DMA | | 185 | |
| | CTE / Z-Axis Expansion Z-轴热膨胀系数 | 2.4.24 | Alpha 1 | ppm/°C | 40 | |
| | | | Alpha 2 | | 230 | |
| | X/Y CTE X/Y-轴热膨胀系数 | 2.4.24 | 50 - 260 °C | % | 2.6 | |
| | T-260 | 2.4.24.1 | 40 °C - 125 °C | ppm/°C | 12/15 | |
| | T-288 | 2.4.24.1 | TMA | min | >60 | |
| T-288 | 2.4.24.1 | TMA | min | >35 | | |
| TD(5% weight loss) | 2.4.24.6 | TGA | °C | 356 | | |
| Flammability 燃烧性 | UL94 | E-24/125 | Rating | V-0 | | |
| Electrical 电性能 | Surface Resistivity 表面电阻率 | 2.5.17.1 | C-96/35/90 | MΩ | 6.2x10 ⁸ | |
| | Volume Resistivity 体积电阻率 | 2.5.17.1 | C-96/35/90 | MΩ-cm | 5.5x10 ⁹ | |
| | Dielectric Breakdown 击穿电压 | 2.5.6 | D-48/50+D0.5/23 | kV | ≥45 | |
| | Dielectric Constant 介电常数 | 2.5.5.9 | Etched (RC50%) | @ 1 MHz | — | 4.8 |
| | | | | @ 1 GHz | — | 4.6 |
| | Loss Tangent 介质损耗 | 2.5.5.9 | Etched (RC50%) | @ 1 MHz | — | 0.015 |
| | | | | @ 1 GHz | — | 0.016 |
| CTI 相对漏电起痕指数 | IEC60112 | Etched/0.1% NH ₄ CL | V | ≥175 | | |
| Arc Resistance 耐电弧性 | 2.5.1 | D-48/50+D-0.5/23 | Sec | 129 | | |
| Mechanical 机械性能 | Peel Strength (1 oz.) 铜箔剥离强度 | 2.4.8 | A | N/mm | -- | |
| | | | Float 288 °C / 10 Sec | | 1.45 | |
| | Flexural Strength 弯曲强度 | 2.4.4 | Lengthwise | N/mm ² | 550 | |
| | | | Crosswise | | 485 | |
| Water Absorption 吸水率 | 2.6.2.1 | D-24/23 | % | 0.09 | | |

Remarks:

- Typical Values for reference only.
- Standard Values according to IPC-4101E/99/101/126
- Typical Value of Specimen thickness is 1.6mm (#7628*8)

注:

- 典型值只供参考
- 规格值参照 IPC-4101E/99/101/126
- 样品的厚度为 1.6mm (#7628*8)

