

适用于高密度安装的导电性材料

Copper paste for high density mounting

烧结型铜浆 ELTRACE CP-1001ZN



日油株式会社
油化事业部



NOF CORPORATION
Oleo & Speciality Chemicals Div.

特点 ELTRACE CP-1001-ZN Features

- 可比电镀法更简便地形成导电膜 Process can be shortened.
- 由于低热膨胀, 接合可靠性良好 Good joint reliability due to low-CTE*1.
- 对无机基板具有良好的附着性 Good adhesion to various inorganic substrates.
- 由于无粘合剂, 焊锡润湿性良好 Good solder wettability due to binder resin free.
- 由于无纳米粒子, 保管稳定性良好 Good stability due to nanoparticle free.

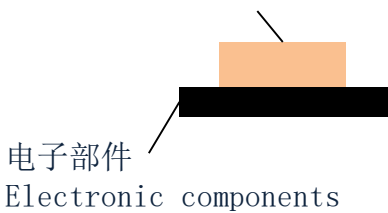
*1 CTE: Coefficient of Thermal Expansion

使用示例 Application of ELTRACE CP-1001-ZN

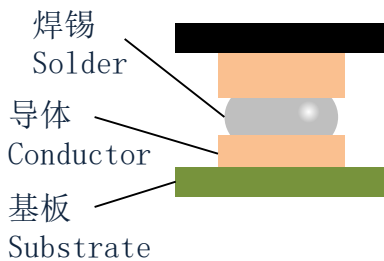
电极的形成

Electrode formation

铜浆烧结膜 (电极)
ELTRACE electrode



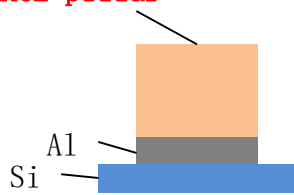
倒装芯片安装
Flip chip mounting



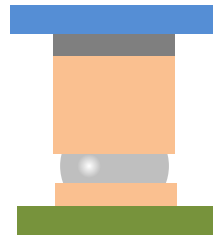
铜柱的形成

Cu pillar formation

铜浆烧结膜 (柱)
ELTRACE pillar



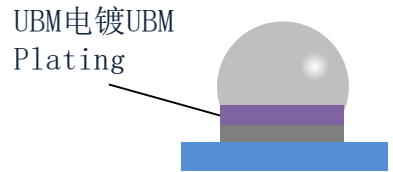
倒装芯片安装
Flip chip mounting



UBM*2膜的 formation

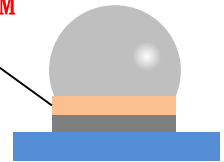
UBM formation

[传统法 Conventional method]



[新方法 New method]

铜浆烧结膜 (UBM代替)
ELTRACE UBM



*2 UBM: Under Bump Metal

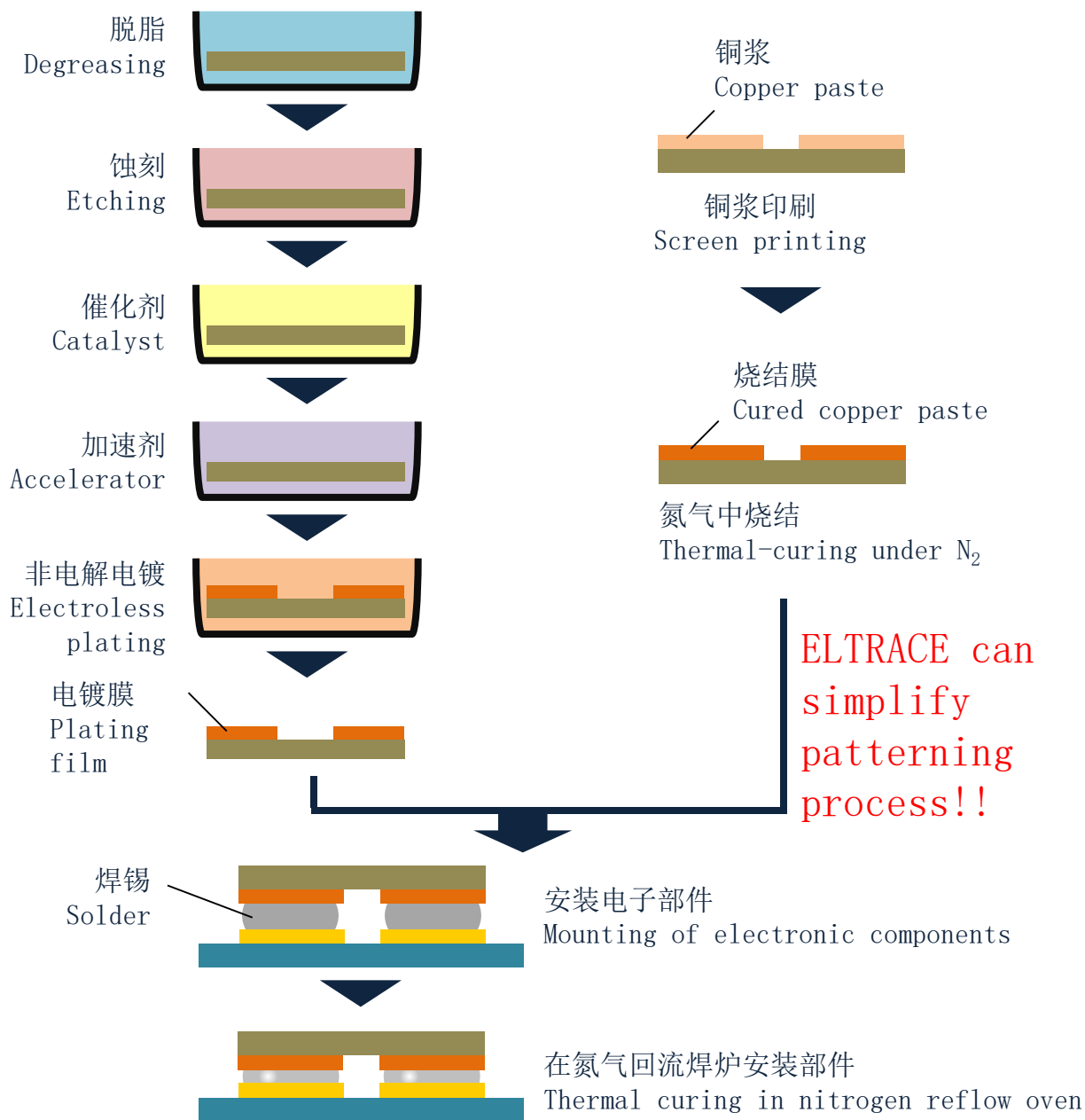
一般特性 General characteristics

项目 Items	试验条件 Test conditions	测量值 Results
粘度 Viscosity	E型粘度计, 25°C, 5rpm E type viscometer, 25°C, 5 rpm	10~50 Pa·s
体积电阻率 Volume resistivity	建议烧成条件 Recommended curing condition 500°C×90min (O ₂ <600 ppm)	5~10 μΩ·cm
附着强度 Bond strength with solder	螺柱销垂直拉伸试验 基板: Al ₂ O ₃ Vertical pull instrument with stud pin	5 MPa

传统法和印刷法的比较 Conventional method vs Printing method

传统法（非电解电镀） Electroless plating

印刷法（铜浆） ELTRACE printing



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