

# フォトレジストフィルムによるLTCCグリーンシート上への 微細銀導体パターンの形成方法

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Formation Method for Silver Fine Conductor Pattern on LTCC Green Sheet by Photo-Patterned Resist Film

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## Abstract

Fine patterning of the conductor on LTCC (Low Temperature Cofired Ceramic) green sheets is required for miniaturization of the devices. Although screen printing technology has been used for conductor patterning on the green sheet from the beginning of LTCC development, there are limitations to the fine patterning that can be achieved by this conventional technology. A new method for patterning the green sheet is proposed in this paper to replace screen printing. We attached an optically pre-patterned resist film to the LTCC green sheet, and passed the paste through the pattern slits to form a fine conductor pattern according to the design. The obtained line width was  $30\ \mu\text{m}$  and the height was  $25\ \mu\text{m}$ . The remarkable result was that the cross-section of the obtained pattern was almost rectangular. The shape was quite different from the arched cross section produced by screen printing.

**Key Words:** LTCC, Fine Pattern, Resist Film, Silver Paste