TGV Cu metallisation on Glass Technology for avionics application

Tetsuya Onishi, Masatoshi Takayama

Koto Electric Co., Ltd.

Ryusen, Taito-Ku, Tokyo, Japan
tetsuya_onishi@koto-jp.com

ABSTRACT

For applications such as high-speed transmission, 5G & 6G communication, and new optical devices, a substrate that does not absorb moisture, has small CTE, and has less warpage is required. This presentation will show direct wet Cu metallization on Glass TGV (thru-glass via) technology for antenna, RF device, and optical platform solution application trends without any PVD seed layer.

It is believed that conformal metallization on glass with the highly conductive thick Cu material is expected to enhance the performance of RF electronic & optical devices in the new avionics system.

Keywords: Glass optical application platform, TGV, Avionics Antenna, RF device, direct wet Cu plating