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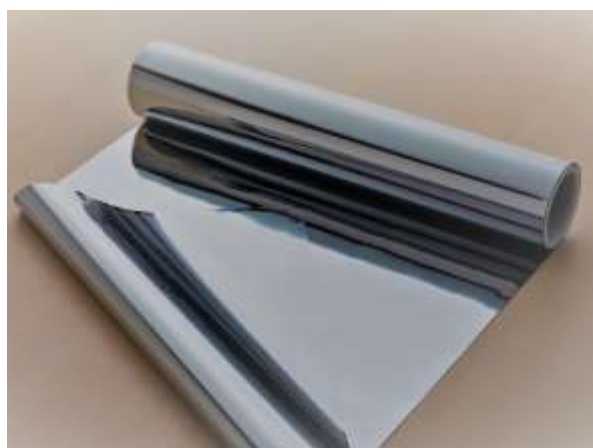
DIC Corporation

New Seed Film for Fabricating Wiring on High-Frequency PWBs Developed by DIC and Taiyo Ink Wins in the 16th JPCA Awards

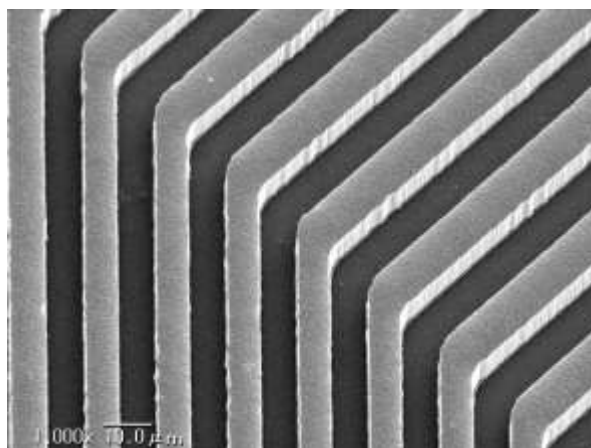
*—Acclaimed as a technology that will reduce transmission loss
in the high-frequency bands used for 5G—*

Tokyo, Japan—DIC Corporation announced today that a new seed film for fabricating wiring on high-frequency printed wiring boards (PWBs) developed with Taiyo Ink Mfg. Co., Ltd., a subsidiary of DIC Group company Taiyo Holdings Co., Ltd., was selected for an award as part of the 16th JPCA Awards.*

Designed for electronic devices for use in the high-frequency bands supported by the next-generation 5G mobile communications technology standard, film was developed by DIC and Taiyo Ink as a new application for DIC's metallic nanoparticles in the fabrication of flexible printed wiring boards. The film coated with the metallic nanoparticles are used as a conductive seed layer in the formation of copper wiring using semi-additive process. The seed layer is removed after the pattern is complete. Because it is made with a metal different from copper, the seed layer can be removed independently without degrading the copper wiring. This leaves the surface of the copper wiring extremely smooth, greatly reducing transmission loss in the high-frequency bands used for 5G.



New seed film for fabricating wiring on high-frequency PWBs



Copper wiring formed from the new seed film (thickness: 8 μ m)
Diagonal wiring L/S: 10/10 μ m, vertical wiring L/S: 8/8 μ m

In selecting the film for this award, which went to Taiyo Ink, the judges praised it as a new technology that offers outstanding promise for application in devices for use in high-frequency bands.

DIC and Taiyo Holdings entered into a capital and business alliance in 2017. Since then, the two companies have worked to maximize synergies and build a robust collaborative relationship. DIC

recognizes this award as solid evidence of the success of these efforts and is delighted at the positive assessment earned by Taiyo Ink. DIC looks forward to capitalizing further on these synergies to drive growth and support the evolution of both companies in the years ahead.

—Ends—

* The four winners of the 16th JPCA Awards were chosen from among participants who had registered to participate in the JPCA Show 2020, the 50th edition of this international exhibition. Established by the Japan Electronics Packaging and Circuits Association (JPCA) in 2005, the JPCA Awards program recognizes products and technologies that make a substantial contribution to advances in electronic circuit technologies and related industries. Both the JPCA Show 2020 and the 16th JPCA Awards presentation ceremony were ultimately cancelled as a consequence of COVID-19.

References:

- Taiyo Holdings press release (Japanese only)
http://www.taiyo-hd.co.jp/cms/wp-content/uploads/2020/06/20200626_01.pdf
- Paper on award-winning technology: New Seed Film for Forming Wiring on High-Frequency PWBs (submitted by Taiyo Holdings) (Japanese only)
https://www.jpca-show.com/show2020/common/pdf/JPCAaward2020_taiyo.pdf

Related press release:

- Notice Concerning a Capital and Business Alliance with Taiyo Holdings Co., Ltd. (January 25, 2017)
https://www.dic-global.com/en/news/news_file/file/20170125_0_en.pdf