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Asahi Glass Succeeds in Development of New Photosensitive Insulating Film for Packages

AGC Asahi Glass Co., Ltd.

AGC (Asahi Glass Co., Ltd., Head Office: Tokyo; President & COO: Kazuhiko Ishimura) has successfully developed a new photosensitive insulating film. This new product shows well-balanced thermal, electrical, and mechanical properties. AGC is targeting rewiring layers in the packaging and assembly of semiconductor devices as one of the main applications for this new product. AGC will begin to manufacture the new insulating film at its Chiba Plant, with marketing commencing in January 2009.

Semiconductor devices are used in various types of electronic equipment. Currently, electrodes are fabricated on rewiring layers that are formed on insulating passivation films in order to achieve increased interconnection density and overall product miniaturization. Against this backdrop, it is important for insulating films, used in such applications, to feature low-temperature curing properties that do not stress devices; high flexibility to increase interconnection reliability; and low dielectric constant/low dielectric loss to achieve high speed. None of the existing photosensitive insulating materials have satisfied all these requirements, therefore putting a lot of restrictions on current package production and device design.

This new AGC-developed insulating film makes use of one of AGC's core technologies – fluorine chemistry – and will be extremely useful in the development and manufacture of increasingly fast, miniaturized semiconductor circuits, as it achieves well-balanced performance, including low-temperature curing (180-250 degrees C), a very low dielectric constant (2.6-2.7), and high flexibility (20%), in addition to having a high resolution, planarization, and low absorbency. To evaluate processability, AGC implemented a process development program in cooperation with RTI International in Research Triangle Park in the U.S. which has successfully developed processing guidelines for the new dielectric film.

Under JIKKO-2010, AGC's medium-term management plan that started in 2008, we are targeting a 2010 operating profit margin of 15% for Electronics & Energy operations by concentrating on growing businesses; this new product is part of this effort. In the future, AGC will continue to develop products, based on its proprietary technologies, that can improve customer production processes

©For further information regarding these issues, please contact Toshihiro Ueda, GM of Corporate Communications and Investor Relations, Asahi Glass Co., Ltd.

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Reference

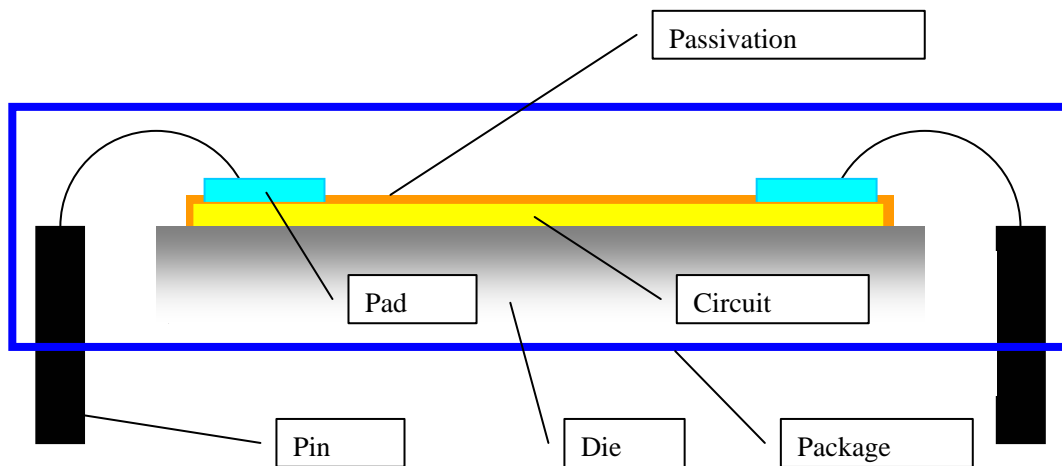
1. Insulating passivation film

An insulating passivation film is an insulating film deposited to protect the wiring's surface from external damage after the completion of the wiring process.

2. Rewiring layer

A rewiring layer is wiring fabricated to form joining terminals on an insulating passivation layer.

<Conventional wiring>



<Type of rewiring>

