



SCHOTT Glass-to-Metal Sealed Hermetic Feedthroughs and Packages Improve Performance of Aircraft Proximity Sensors

Glass-to-Metal Technology Provides Several Advantages over Conventional Packaging Systems

Mainz, May 18, 2010 - SCHOTT Electronic Packaging has a range of hermetically sealed glass -to-metal feedthroughs and packages specifically developed to protect a variety of sensors that are particularly suitable for proximity sensors on aircraft. The sealing technology, developed by SCHOTT, provides several key advantages over conventional packaging systems that have been commonly used for many years.

Properly functioning proximity sensors are critical for flight safety and reliable operation of the aircraft. Dependable, long-lasting hermetic packages from SCHOTT are designed to protect proximity sensors from condensation, corrosion and other common in-flight stressors. They are manufactured specifically for the most vulnerable sensors – including those placed in outside doors and landing gear – that are consistently exposed to extreme conditions.

“One of the major challenges facing the industry today is sensor failure, which can result in departure delays and an increase in maintenance,” says Matthias Rindt, Sales Manager responsible for SCHOTT Electronic Packaging’s avionics products. “SCHOTT’s hermetic packages provide a much more effective solution as the technology has a long track record for ruggedness.”

Sensors are used to monitor various aspects of an aircraft and detect critical items, such as whether doors are properly closed or landing gear is not operating properly. Protecting these sensors is critically important to the safe operation of the aircraft.

The technology behind SCHOTT’s glass-to-metal hermetically sealed proximity sensors has been used in automobiles for

Visit SCHOTT at
**Aircraft Interiors
EXPO** in Hamburg,
May 18-20, 2010

Hamburg Messe
Hall B5 booth 5G80



SCHOTT AG
Hattenbergstrasse 10
55122 Mainz
Germany
Phone +49 (0)6131/66-2411
E-Mail info.cpr@schott.com
Internet www.schott.com



many years. "They are so durable, and reliable, that they routinely outlive the cars," says Matthias Rindt. "The car may be dead, but the sensor still works. "With commercial aircraft in near-constant service 12 years or more, sensors need to be packaged with material that would actually outlast them."

Advanced Design and Materials

SCHOTT's glass-to-metal design shields aircraft sensors from a broad range of in-flight variables. The packages are water-, humidity- and gas-tight, and constructed of nonflammable materials that do not produce hazardous fumes. Likewise, the materials are chemical-resistant and can be used in locations where contact with solvents or petroleum is likely, such as fuel tanks. The products can withstand pressures of up to 4,500 bars and are tested with temperature shocks within a range of -65°C to +150°C for 15 cycles. Due to the high rate of metal parts that are used for the packaging, the packages provide EMC/EMI shielding.

SCHOTT offers a series of standard hermetic packaging solutions on the basis of glass-to-metal and ceramic-to-metal sealing technology for a broad range of sizes and will work with clients to custom-design packages and feedthroughs for the smallest or most uniquely shaped sensors. The company employs smaller pin pitch sizes (e.g. two-pin glass-to-metal feedthrough with a diameter of 1.2 mm) or ceramic feedthroughs to achieve effective miniaturization, while at the other end of the scale diameters of up to 1000 millimeters can also be realized. Glass-to-metal sealed packages and feedthroughs from SCHOTT Electronic Packaging are already commonly used in avionics, e.g. for relays or DC/DC converters. SCHOTT's hermetic seal technology meets stringent military specifications.

As a business unit of the SCHOTT group, SCHOTT Electronic Packaging is a leading manufacturer of housings and other components for the reliable, long-term protection for sensitive electronics. The core technologies are glass-to-metal and

SCHOTT AG
Hattenbergstrasse 10
55122 Mainz
Germany
Phone +49 (0)6131/66-2411
E-Mail info.cpr@schott.com
Internet www.schott.com



ceramic-to-metal sealing, thermal sensing components as well as a variety of cutting edge specialty glass competences. With 1,500 employees at four production locations and several competence centers around the world, local customer support and co-developments for individual packaging solutions are at the heart of the business, serving the world's leading manufacturers in the aviation, automotive, data- and telecommunication, sensors and semiconductors, consumer electronics, home appliances, laser, medical as well as security and tracking industries.

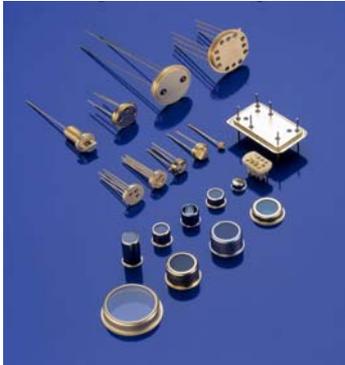
Already today, SCHOTT Aviation components can be found in many airplanes. The business platform has intensified its commitment to the aircraft industry by bundling its related activities. SCHOTT has been active in this sector since the early 1990s and offers its customers specially-designed products: innovative solutions provide both intelligent illumination as well as attractive design inside the cabin. In-seat reading lights and mood lighting scenarios increase passenger comfort even further. Optoelectronic components on the basis of glass/ceramic-to-metal seals in addition to special optical glass and coatings also contribute towards greater safety on board an aircraft.

SCHOTT Aviation – your partner for solutions in Interior Design, Electronics & Sensors, Datacom and Navigation.

5,136 characters including empty spaces

SCHOTT is an international technology group that sees its core purpose as the lasting improvement of living and working conditions. To this end, the company has been developing special materials, components and systems for over 125 years. The main areas of focus are the household appliances industry, pharmaceuticals, solar energy, electronics, optics and the automotive industry. The SCHOTT Group is present in close proximity to its customers with production and sales companies in all its major markets. The Group's approximately 17,400 employees generated worldwide sales of approximately 2.3 billion euros in the fiscal year 2008/2009. The company's technological and economic expertise is closely linked with its social and ecological responsibility. SCHOTT AG is an affiliate of the Carl-Zeiss-Stiftung (Foundation).

SCHOTT AG
Hattenbergstrasse 10
55122 Mainz
Germany
Phone +49 (0)6131/66-2411
E-Mail info.cpr@schott.com
Internet www.schott.com



ID#23125

Transistor enclosures by SCHOTT Electronic Packaging Asia are manufactured in Singapore. They reliably encapsulate electronic components and provide them with long-term protection against influences that could adversely affect their operation.

Press photographs from SCHOTT are available for downloading from: www.schott-pictures.net

Contact:

SCHOTT AG
Dr. Haike Frank
PR Manager
Corporate Public Relations
Phone: +49 (0)6131/66-4088
Fax: +49 (0)3641/28889-141
E-Mail: haike.frank@schott.com
Internet: www.schott.com

SCHOTT AG
Hattenbergstrasse 10
55122 Mainz
Germany
Phone +49 (0)6131/66-2411
E-Mail info.cpr@schott.com
Internet www.schott.com