

**NEWS RELEASE**

PR0117E

**ALPS Electric Develops and is to Commence Mass Production of “FLGPJ Series” Narrow Aspherical Glass Lens with Chucking Area***Contributing to Compact, High-Density Optical Transceivers*

Munich, February 06, 2017 – ALPS Electric has developed the “FLGPJ Series” Narrow Aspherical Glass Lens suitable for compact, high-density optical transceivers. Mass production will begin in July 2017.

The establishment of broadband communication networks based on fiber optics and other technologies plus the recent spread of such mobile devices as smartphones and tablets have led to the rise of services involving the transmission and receipt of large volumes of data. Examples are social networking services (SNS), gaming and video distribution. Data traffic over the Internet is increasing all the time as a result and the trend is expected to continue as Internet of Things (IoT) technology is embraced by a wide range of industries.

Infrastructure operators, who run data centers for storing data and the communication lines, are trying to support high-capacity communication networks by downsizing optical transceivers and other equipment for fiber-optic communication systems to allow installation of multiple devices in the limited space available. Equipment therefore has to be more compact and of higher density, increasing the need for similar downsizing of the electronic components inside them.

For optical transceivers, Alps Electric has so far carried out mass production of square aspherical glass lenses, with a width and height of 1mm. Now Alps has developed the FLGPJ Series, an aspherical glass lens with a narrow width and a chucking area.

The FLGPJ Series has a narrow width measuring 0.6mm across and the chucking area at the top improves ease of handling when

mounting during end product assembly and when making adjustments, contributing to high-density mounting. And despite the compact dimensions, the lens achieves an effective numerical aperture (NA) of 0.5. Furthermore, the FLGPJ Series employs lead-free glass, achieving compliance with both RoHS 6 and REACH regulations.

Alps Electric will continue contributing to the creation of smaller optical communication equipment with higher density by harnessing technologies in the areas of optical design, mechanical design, mold and die manufacturing, molding and simulation built up over more than 25 years serving the optical communication market, and through stable supply of high-quality products.

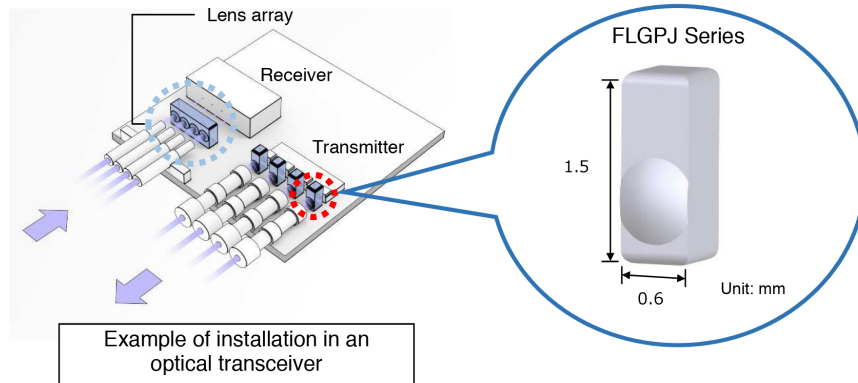
## Features

Chuckling area at the top improves handling ease during end product assembly

1. Lens with a 0.6mm narrow width and a chuckling area for greater mounting efficiency
2. Achieves NA 0.5 despite the 0.6mm width (0.45mm focal length at 1310nm)
3. Employs lead-free glass material, achieving compliance with RoHS 6 and REACH

## Specifications

Model	FLGPJ Series
Dimensions (W×D×H)	0.6 × 0.8 × 1.5mm
Wavelength (λ)	1310nm, 1550nm
Effective NA	0.5, 0.55
Focal length (f)	0.45 (1310nm)
Target device	Chip type LD (2-lens system)
L1 [WD]	0.14mm (1310nm)
Beam diameter	0.45mm (1310nm) at effective NA
Operating temperature range	-40 to +85°C
Transmitted wavefront aberration (RMS: root mean square)	0.045λ
Transmittance	98% (1310nm, 1550nm)



#### **ALPS Electric Co., Ltd.**

ALPS Electric (Tokyo: 6770) is a leading global manufacturer of high-quality electronic components for mobile devices, home electronics, vehicles and industrial equipment. With the philosophy of "Perfecting the Art of Electronics" ALPS Electric supplies over 40,000 different components to about 2,000 companies all over the world. For more information, visit [www.ALPS.com](http://www.ALPS.com).

**ALPS ELECTRIC EUROPE GmbH**, a subsidiary of ALPS Electric Co., Ltd., was established in 1979. Since 2013 the European Head Office has been located in Munich and as such co-ordinates the Sales, Marketing and Product Engineering activities of our branch offices in Munich, Düsseldorf, Paris, Milton Keynes, Gothenburg as well as our sales office in Milan.

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