

**NEWS RELEASE**

PR0508E

**Alps Develops FPDJ8 Series of 1/10 Opt Inch VGA Camera Modules***Industry's Smallest and Thinnest*

Duesseldorf, Germany, May 28, 2008 – ALPS ELECTRIC has completed the development of the FPDJ8 series, the industry's smallest and thinnest 1/10 opt inch<sup>\*1</sup> VGA<sup>\*2</sup> camera module for use in mobile phones and handheld game machines.

In recent years, an increasing number of mobile phones are being equipped with sub cameras for taking self-portraits or making video calls. Because sub cameras are usually positioned close to the LCD display, space available for mounting the camera module is limited. Moreover, because mobile phone bodies have a predominately flat profile, there is a demand for a compact and thin camera module for sub camera use.

With this new product, ALPS has achieved the industry's smallest VGA camera module (5.0mm wide x 5.0mm deep x 2.2mm high). The VGA camera module's compact and thin profile has been achieved thanks to a proprietary structure developed by Alps Electric wherein the lens is directly mounted to the module's interior.

In addition, while it is the industry's smallest VGA camera module, its F value, which describes lens brightness, is 2.8, and the angle of view is 65.4° on the diagonal. Moreover, the new module boasts a performance level equal to that of the previous model.

ALPS provides both flexible PCB and socket type connection to the body of the finished product. Moreover, 11-wire parallel and 4-wire serial (MIPI<sup>\*3</sup>) interfaces are available for transmitting

image data between the camera module and the mobile phone unit. Compatible with both parallel and serial interfaces and offering the above-mentioned connection methods, the camera module provides manufacturers with engineering flexibility.

\*1 Opt inch: A display method customarily used to set the diagonal length of the image pickup tube used with the video camera with that of the camera module's image pickup device. 1/10 opt inch is equivalent to approximately 1.8mm.

\*2 VGA: Abbreviation for Video Graphic Array, with a 640 x 480 dot display resolution.

\*3 MIPI: Abbreviation for Mobile Industry Processor Interface, the MIPI Alliance standards body interface specification for mobile phones.

## Features

Industry's smallest and thinnest 1/10 opt inch VGA camera module (FPDJ8 Series)

1. Industry's smallest and thinnest camera module thanks to a proprietary structure developed by Alps Electric wherein the lens is directly mounted to the module interior.
2. Variety of connection methods and communication interfaces provides manufacturers with engineering flexibility.

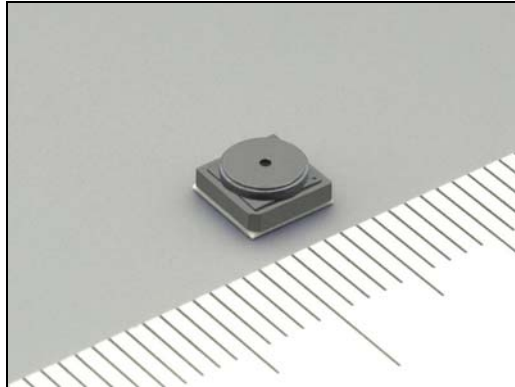
## Principal Applications

Mobile phones, game machines, image recognition sensors of various devices, etc.

## Specifications

Product name	FPDJ8 series	
Resolution	VGA (640 x 480 dots)	
Dimensions (W x D x H)	5.0mm x 5.0mm x 2.2mm	
Lens structure	2-lenses	
Focus range	20cm to infinity	
F value	2.8	
Angle	Horizontal	54.2°
	Vertical	42.0°
	Diagonal	65.4°
Image distortion	Less than 1%	
Connection method	Flexible PCB/Socket	
Interface	Parallel/Serial (MIPI)	

For more information on the new the product please visit  
[http://www3.alps.com/e/npv\\_product/0425\\_FPDJ/FPDJ\\_E.PDF](http://www3.alps.com/e/npv_product/0425_FPDJ/FPDJ_E.PDF)



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

Since its establishment in 1948 ALPS has grown as a comprehensive manufacturer of electronic components. At present ALPS is creating innovative high-value-added products in its main business segments – Components, Magnetic Devices, Communications, Peripheral Products, and Automotive Electronics – which are contributing to the advance of a digital society. ALPS is a global company that carries out its operations with 23 production bases in 9 countries as well as 57 sales bases in 14 countries. Consolidated net sales in the year ended March 31, 2007 amounted to YEN 708 billion.

**ALPS ELECTRIC EUROPE GmbH**, a subsidiary of ALPS Electric Co., Ltd., was established in 1979. Since 1989, the European Head Office has been located in Düsseldorf, where a team of specialists works in Sales, Marketing, and Product Engineering. The activities of our branch offices in Munich, Paris and Milton Keynes, our sales office in Milan and our European distribution work are co-ordinated from Düsseldorf. ALPS Nordic AB, a 100 percent subsidiary of ALPS ELECTRIC EUROPE GmbH, is based in Sweden and services the Scandinavian market.

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