

# KDS1001AF2

The KDS1001AF2 is a high-output, high-speed silicon position sensitive diode for Automatic focusing of camera and sun sensor. The KDS1001AF2 have two active areas(photodiodes) integrated in one chip.

### Features

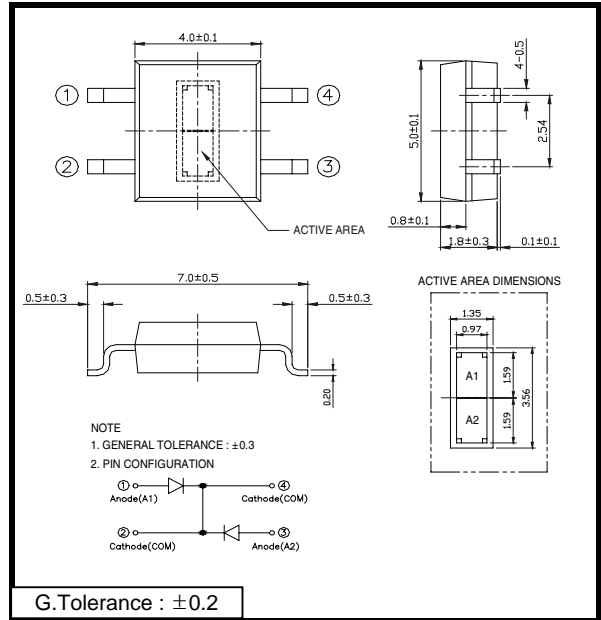
- Laser beam focusing
- positioning is best performed
- High-speed response by PIN construction

### Applications

- Automatic focusing of camera
- Sun sensor

### Dimensions

[Unit : mm]



### Absolute Maximum Ratings

[T<sub>A</sub> = 25°C]

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>R</sub>	30	V
Power Dissipation	P <sub>D</sub>	30	mW
Operating Temperature	T <sub>opr.</sub>	-40~+120	°C
Storage Temperature	T <sub>stg.</sub>	-45~+120	°C
Soldering Temperature <sup>*2</sup>	T <sub>sol</sub>	260	°C

\*1. Within +/- 10% compared to the initial output, after operation under the condition of 5V and 1K Ohm.

\*2. Within +/- 10% compared to the initial output, after leaving as it is without electrical load.

\*3. For MAX. 5 seconds at the position of 2 mm from the package.

### Electro-Optical Characteristics

[T<sub>A</sub> = 25°C]

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open Circuit Voltage	V <sub>oc</sub>	E <sub>v</sub> =1000lx <sup>*4</sup>		0.35		V
Short Circuit Current *5	I <sub>sc</sub> (A1)	E <sub>v</sub> =1000lx <sup>*5</sup>	18	21	24	uA
	I <sub>sc</sub> (A2)	E <sub>v</sub> =1000lx <sup>*6</sup>	18	21	24	uA
Dark current	I <sub>d</sub>	V <sub>R</sub> =10V			20	nA
Capacitance	C <sub>t</sub>	V <sub>R</sub> =10V, f=1MHz		10		pF
Spectral sensitivity	λ		450~1,050			nm
Peak Wavelength	λ <sub>p</sub>	V <sub>R</sub> =0V	-	900	-	nm
Half Angle	Δθ		-	± 65	-	deg.

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