

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

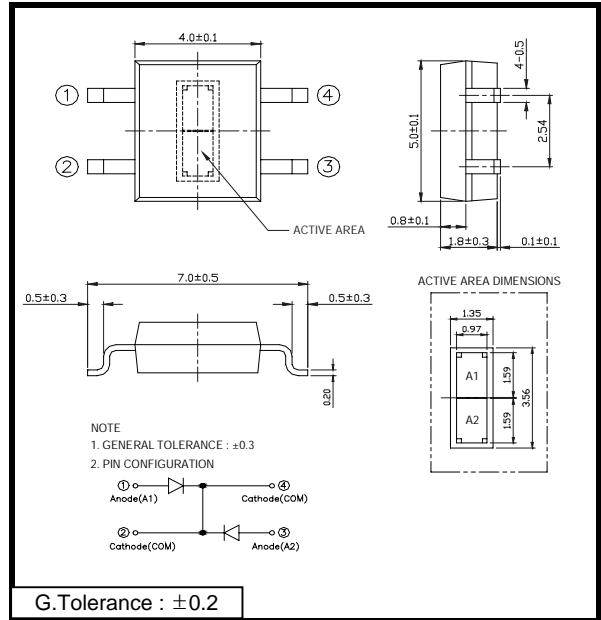
- Laser beam focusing
- positioning is best performed
- High-speed response by PIN construction

Applications

- Automatic focusing of camera
- Sun sensor

Dimensions

[Unit : mm]



Absolute Maximum Ratings

[T_A = 25°C]

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	30	V
Power Dissipation	P _D	30	mW
Operating Temperature	T _{opr.}	-40~+120	°C
Storage Temperature	T _{stg.}	-45~+120	°C
Soldering Temperature ^{*2}	T _{sol}	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_A = 25°C]

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Open Circuit Voltage	V _{oc}	E _v =1000lx ^{*4}		0.35		V
Short Circuit Current *5	I _{sc} (A1)	E _v =1000lx ^{*5}	18	21	24	uA
	I _{sc} (A2)	E _v =1000lx ^{*6}	18	21	24	uA
Dark current	I _d	V _R =10V			20	nA
Capacitance	C _t	V _R =10V, f=1MHz		10		pF
Spectral sensitivity	λ		450~1,050			nm
Peak Wavelength	λ _p	V _R =0V	-	900	-	nm
Half Angle	Δθ		-	± 65	-	deg.

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