

Position Sensitive Diodes

KODENSHI

SD - 112S · SD - 112F2

The SD - 112, 112F2 are position sensors for automatic focusing of camera.

FEATURES

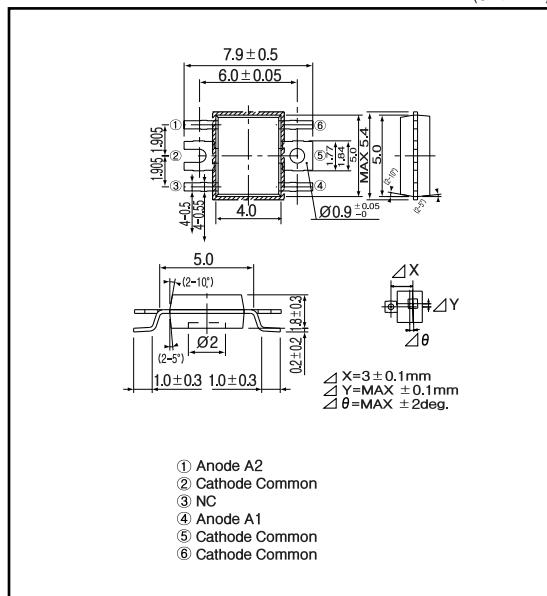
- Visible ray cut off flat package
- Laser beam focusing/positioning is best performed
- With alignment hole

APPLICATIONS

- Automatic focusing of camera

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25 °C)

Item	Symbol	Rating	Unit
Reverse voltage	V _R	30	V
Power dissipation	P _D	30	mW
Operating temp.	T _{opr.}	- 25 ~ +85	
Storage temp.	T _{stg.}	- 30 ~ +100	
Soldering temp.	T _{sol.}	260	

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25 °C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Reverse voltage	V _R	I _R = 10 μA	30			V
Dark current	I _d	V _R = 1V			5	nA
Light current	I _L ^①	V _R = 1V, E = 1000lx ⁵	9	11		μA
Spectral sensitivity				700 ~ 1100		nm
Peak wavelength	λ _p			920		nm
Switching speeds	t _r , t _f	V _R = 1V, R = 1K		2		μsec.
Capacitance	C _t	V _R = 1V, f = 1MHz		10		pF
Resistance	R _s ^②	V _R = 1V, V _a = 0.5V		150	200	K
Signal slope	^③	V _R = 1V	100	0.100		-
Light current difference	I _L / I _L ^④				± 2	%

*1. I_L = I_{L1} + I_{L2} (I_L = Light current of A1, I_L = Light current of A2)

*2. V_a = Voltage of Anode A1,A2

*3. = (I_{L1} - I_{L2}) / (I_{L1} + I_{L2})

*4. I_L = I_{L1} + I_{L2}

*5. Color temp. = 2856K standard Tungsten lamp

Position Sensitive Diode

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