

High Gain Photocurrent Amplifiers IC 450-1050nm 6mm**Linear LDR Photoresistor Light Sensor EKPD111A****Description**

Light sensor, with a chip built in, is sensitive to ambient light. Its photopic response is close to human eye. Being compliant with RoHs, it can be used as replacement of Cds photocell.

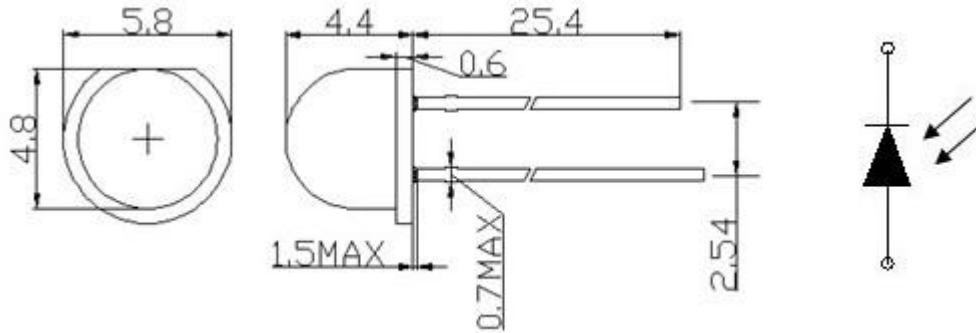
**Features:**

Special filter epoxy encapsulation;
Special response characteristics similar to the human eyes;
Linear output with light changes;
Have certain temperature stability;
Low dark current, low intensity of illumination.

Typical Applications:

Direct replacement of CdS LDR;
Adjust background light, such as PDA, television, Cameras,
LCD/LED displays and mobile phones, etc.;
Electronic toys and lighting equipment

Structure Diagram: (unit:mm)



Ultimate parameters: $T_a=25^{\circ}\text{C}$:

Parameters	Symbol	Rating	Unit
Positive Breakdown Voltage	Vdd	70	V
Reverse Breakdown Voltage	-Vdd	7	V
Max. Power	PD	100	mW
Working Temperature	Topr	-25~+70	$^{\circ}\text{C}$
Storage Temperature	Tstg	-25~+80	$^{\circ}\text{C}$
Welding Temperature (5")	Tsol	260	$^{\circ}\text{C}$

※1 welding at the place 4mm away from the gel, and welding time is no more than 5 seconds.

Electrical Optical Characteristics $T_a=25^{\circ}\text{C}$:

Parameters		Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Light Current	EKPD111A	IC (Vdd=5V Rss=1k)	Vdd=5V, Ev= 10Lux	1500		2500	μA
	EKPD011A		Vdd=5V, Ev= 20Lux	500		1500	
			Vdd=5V, Ev= 100Lux	200		500	
	EKPD011B						
Dark Current		Idrk	Vdd=5V, Ee= 0 ※2			500	nA
Spectrum		λ		450~1050			nm
Saturation Voltage		Vdd-Vss			0.18		V
Rise Time		tr	Vdd=5V, Rss=1k		3.2		μS
Fall time		tf			4.8		μS

※ 2 Ev ,Ee are got in the condition of white LED light.