



DataSheet

Type Description: Ambient Light Sensor

Product model: PALS-S328-X

Ambient Light Sensor

Descriptions

PALS-S328-X Ambient Light Sensor , consisting of a photodiode and a current amplifier IC chips, is a good solution to the power saving application, PALS-S328-X products are a good effective solution to the power saving of display backlighting of mobile appliances, such as the mobile phones, NB and PDAs, CCTV camera Due to the high rejection ratio of infrared radiation, the spectral, The products is a chip with human eye's response

and high infrared immunity. it very suitable product for opto-switch application.

Features

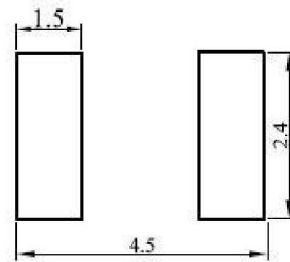
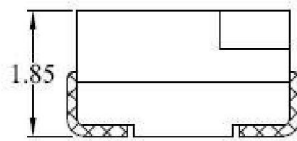
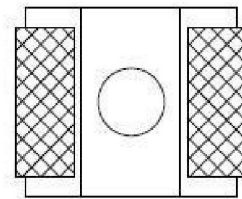
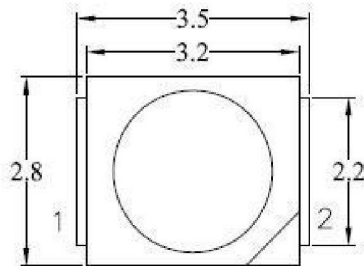
- Spectral response close to the human eye's response
- Excellent infrared immunity
- Recommended operation voltage 5V
- Light threshold adjustable function
- Good output linearity across light intensity
- Low dark current and Low working Lux.
- RoHS compliant and lead-free package

Applications

- Detection of ambient light display backlighting
- CCD camera/CCTV security equipment, Street light
- Vehicle, Security, Camcorder auto night mode control, TFT LCD
- digital camera, toys etc
- Automatic contrast enhancement for light change

PALS-S328-X Ambient Light Sensor

■ Package Dimensions And Materials



1: VDD
2: OUT

Solder PAD

PinDescriptions

Pin	Symbol	Function
1	1	V _{CC}
2	2	V _{out}

Absolute Maximum Ratings (Ta=25°C)

Collector-Emitter Voltage.....5 [V]	Operating Temperature Range.....-30to+85 [°C]
Emitter-Collector Voltage.....2 [V]	Storage Temperature Range.....-40to+100 [°C]
Soldering Temperature.....260 [°C]	

Electro-optical Characteristics

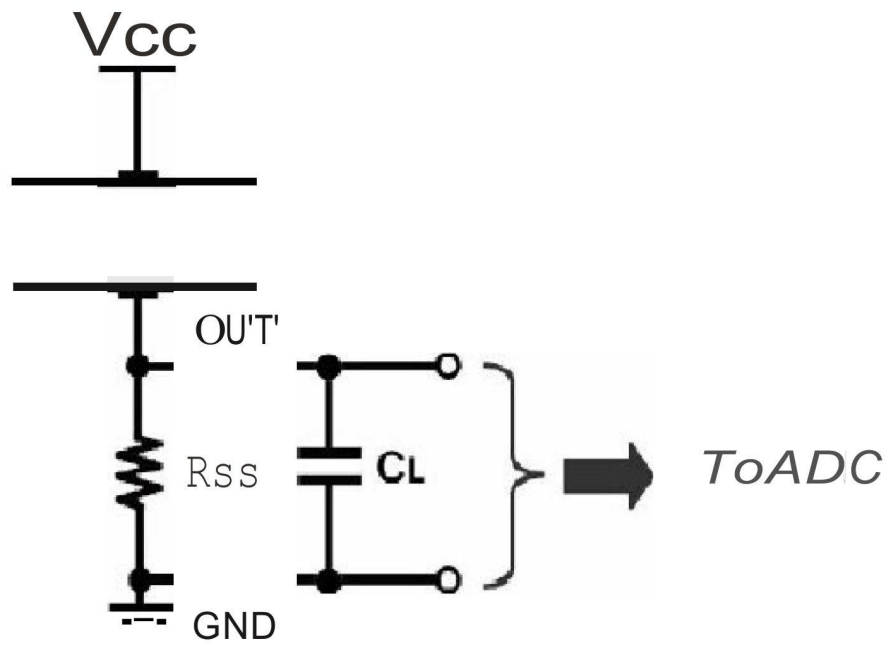
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Light Current	I _o	Vce=5V ,Ev=10Lux	--	6	--	uA
		Vce=5V ,Ev=20Lux	--	12	--	uA
Dark leakage current	I _{DARK}	Vce=5V ,Ev=0 LUX	--	0	0.01	uA
Saturation Output Voltage	V _{out(sat)}	Ev=100Lux, R _{LOAD} =100KΩ	--	1.8	--	V
Gain Linearity			-10		10	%

Note:

1. White Fluorescent light (Color Temperature = 6500K) is used as light source. However, White LED is substituted in mass production.
2. Illuminance by CIE standard Illuminant-A / 2856K, incandescent lamp.

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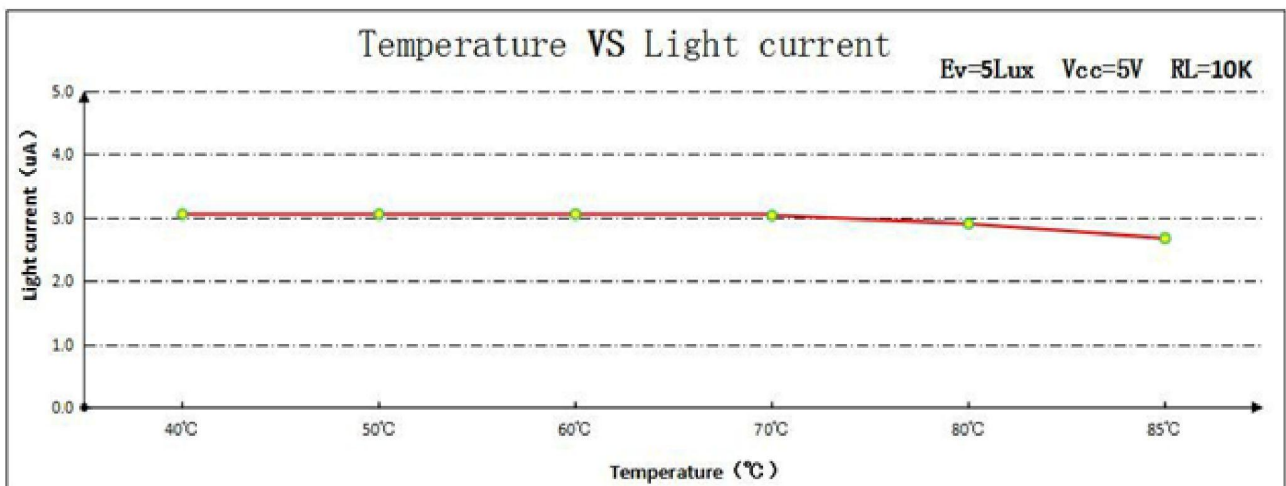
Function 810ck Diagram



LightResponseLinearity

Test condition:Color Temperature = 6500K

Light current vs. Temperature



Dark Leakage vs. Temperature

