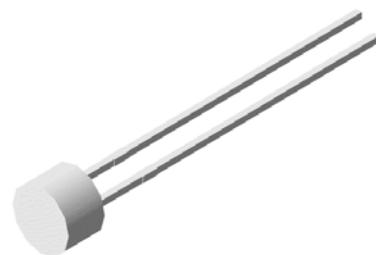


Ambient Light Sensor

OE TC288

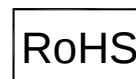
Features

- Low sensitivity variation across various light sources
- Excellent linearity across wide illumination range
- High speed and high sensitive silicon NPN material
- High reliability standard LED package with water clear lens
- Wide supply voltage from 2.5V to 5.5V
- Remain within RoHS compliant



Applications

- Automatic residential and commercial management
- Automatic contrast enhancement for electronic signboard
- Detection of ambient light to central display backlighting



Absolute Maximum Rating $T(\text{amb}) = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Symbol	Condition	Value	Unit
Forward Voltage	V_F	$I_F = 10\text{mA}$	0.5~1.3	V
Reverse Breakdown Voltage	V_{BR}	$I_R = 100\text{ }\mu\text{A}$	35	V
Operating Temperature	T_{opr}		-40 ~ +85	$^{\circ}\text{C}$
Storage Temperature	T_{stg}		-40 to +100	$^{\circ}\text{C}$
Soldering Temperature	T_{sol}		260+/-10	$^{\circ}\text{C}$

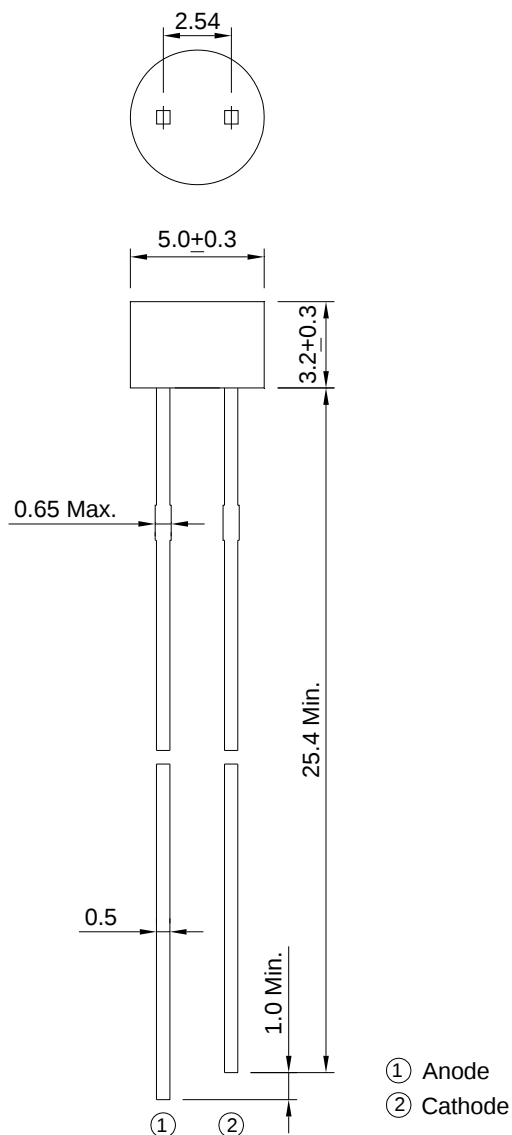
Note: Please take note the Absolute Maximum Rating values. Any operation beyond the specified ratings in this table will result degradation of LED life-span and may cause LED to fail.

Recommended Operating Conditions

Parameter	Symbol	Value	Unit
Supply Voltage	V_{CC}	2.5 ~ 5.5	V
Operating Temperature	T_{opr}	-40 ~ +85	$^{\circ}\text{C}$

Package Dimension:

unit: mm



Notes:

1. All dimensions are millimeters.
2. Tolerance is $\pm 0.2\text{mm}$ unless otherwise specified.
3. Specifications are subject to change without notice.

Optical Characteristics Ta=25°C,unless otherwise specified

Parameter	Test condition	Symbol	Min.	Typ.	Max.	Unit
Dark Current	VR = 5V Ev = 0Lux	ID	--	1	10	nA
Peak Sensitivity Wavelength	---	λp	400	--	700	nm
Light Current	VR = 5V Ev = 100Lux (note1)	IL1	--	0.2	---	uA
	VR = 5V Ev = 1000Lux (note1)	IL2	--	2	---	uA
	VR = 5V Ev = 1000Lux (note2)	IL3	--	3	---	uA
Angle of Half Sensitivity	IF=20mA	$2\theta 1/2$	--	140	--	Deg

Notes:

- (1) White Fluorescent light is used as light source (Color Temperature @ 6500k)
- (2) Illuminati by CIE stand illuminant-A / 2856k.

Typical Electro-optical Characteristics Curves

