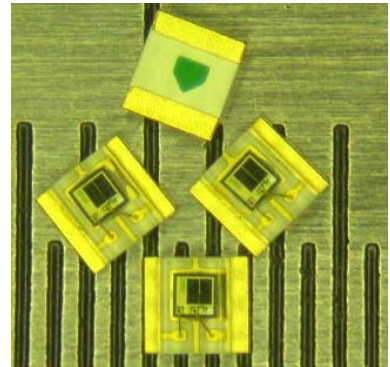


Description

The KOE1615 is an analog-output ambient light photo sensor. This device is an advance ambient light sensor which incorporates photo diode and current amplifier in a single chip.

This device is ideal for applications in which the measurement of ambient light is used to control display backlighting.



Features

- Spectral responsivity close to that of human eye
- Miniature chip LED lead-free surface mount package.
(L1.6mm × W1.5mm × H0.55mm)
- Excellent output linearity of illumination.
- High sensitivity in visible light.

Applications

- Mobile phone
- Notebooks, Web pads
- TVs, Video Cameras, Digital Still Cameras

Absolute Maximum Ratings

(T_A=25°C)

Parameter	Symbol	Rating	Unit
Supply Voltage	V _{cc}	2.4 ~ 5.5	mA
Output Voltage	V _{out}	≤V _{cc}	V
Operating Temperature	T _{opr.}	-35 ~ +85	
Storage Temperature	T _{stg.}	-40 ~ +100	
Soldering Temperature*1	T _{sol.}	260	
Parameter	Symbol	Rating	Unit

*1. Distance from end of the package =2mm, Soldering time=3 seconds. Max.

The contents of this data sheet are subject to change without advance notice for the purpose of improvement.
When using this product, would you please refer to the latest specifications.

Electrical Characteristics (T_a=25°C)

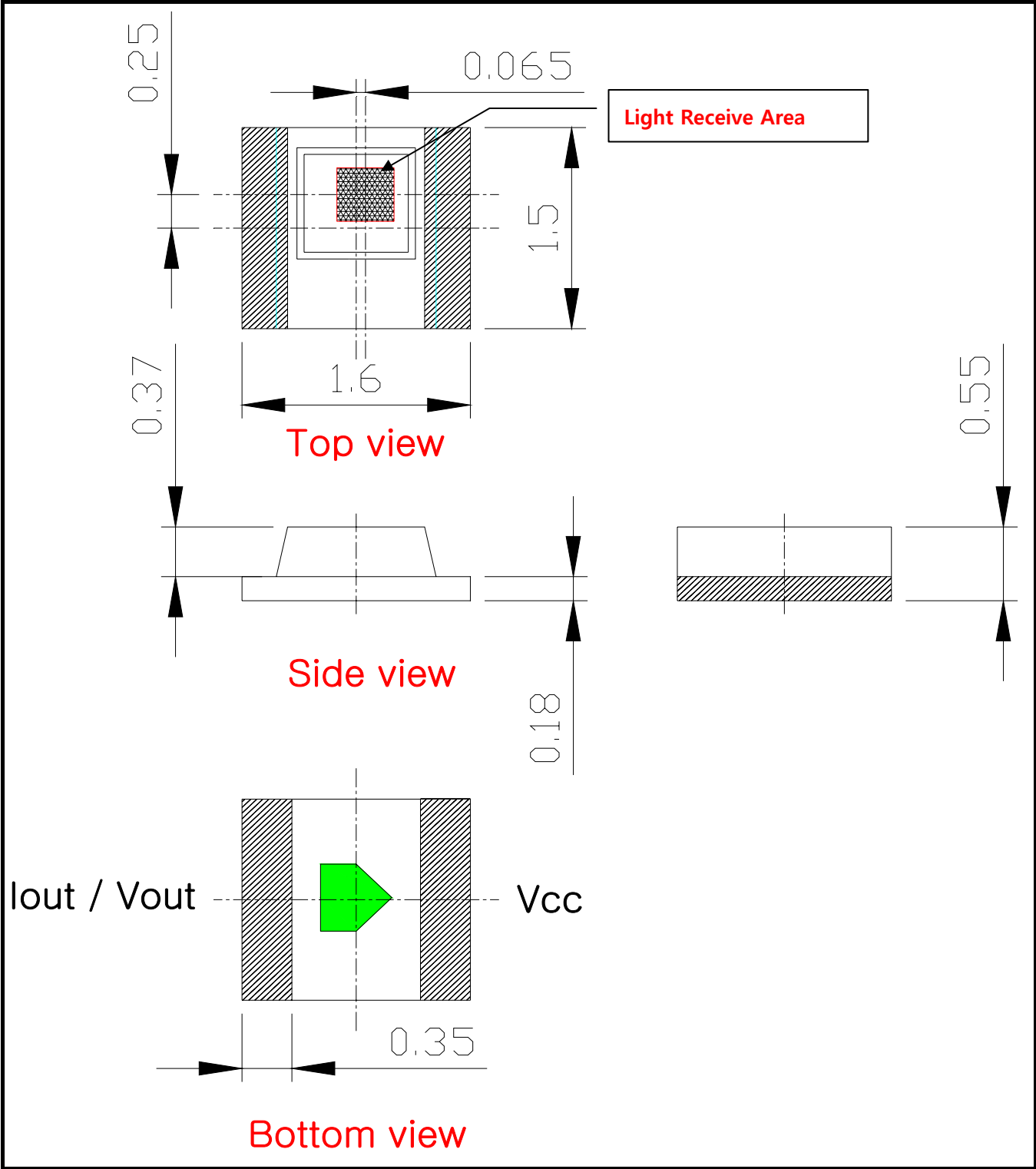
Description	Symbol	Condition	Min.	Typ.	Max.	Unit
Light Current	I _{L1}	V _{CC} = 3V E _v = 100Lux[1][3]	10	-	60	uA
Light Current	I _{L2}	V _{CC} = 3V E _v = 1000Lux[1][3]	100	-	600	uA
Light Current	I _{L3}	V _{CC} = 3V E _v = 100Lux[2][3]	15	-	65	uA
Light Current	I _{L4}	V _{CC} = 3V E _v = 1000Lux[2][3]	150	-	600	uA
Dark Current	I _D	V _{CC} = 3V E _v = 0Lux	0	50	200	nA
Saturation Output Voltage	V _{out}	V _{CC} =3V, E _v =1000Lux, RLOAD=7.5K [1][3]	0	2.0	-	V
Rise time	t _r	V _{CC} =3V, E _v =100Lx RLOAD=1K [3]	-	-	2	ms
Fall Time	t _f		-	-	3	ms
Peak Wavelength	λ _p	I _F =20 mA	-	520	-	nm
Half Angle	Δθ	-	-	±70	-	deg.

Ordering Information

Part Number	Marking Code	Package	Packaging
KOE1615	-	COB	Reel

The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.

Package Outline Dimensions



- Notes : 1. All dimension are in millimeters
- 2. General Tolerance is $\pm 0.1\text{mm}$.

The contents of this data sheet are subject to change without advance notice for the purpose of improvement. When using this product, would you please refer to the latest specifications.