

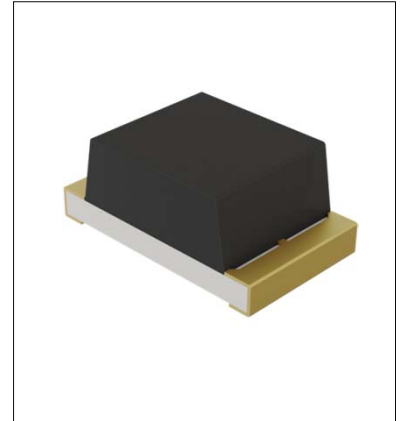
●Applications

- Household applications
- OAs, FAs
- Other general-purpose applications

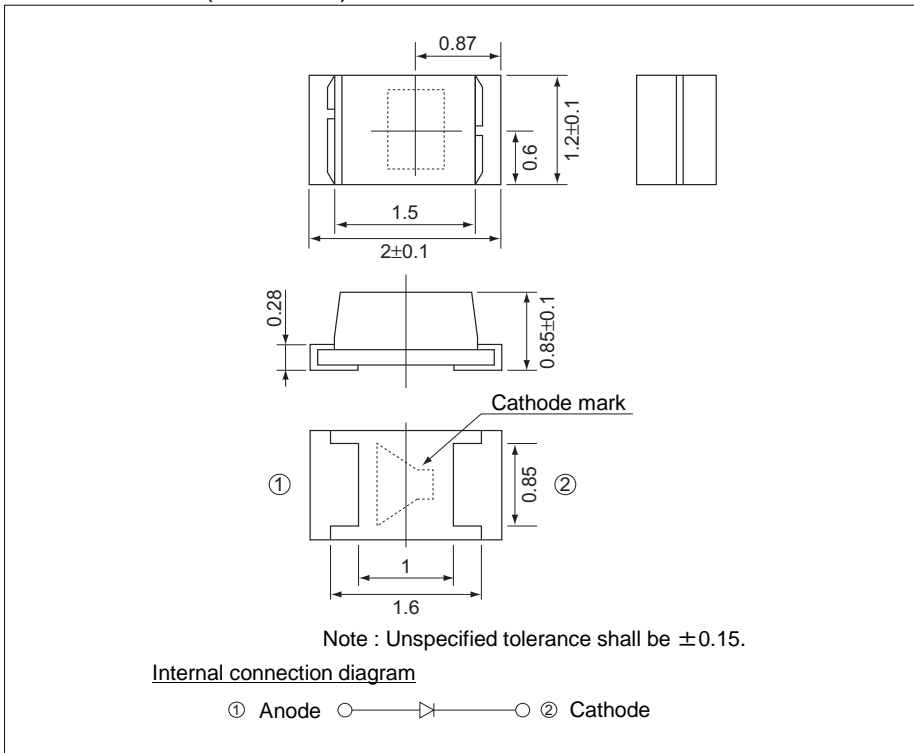
●Features

- 1) Dimensions 2.0x1.2x0.85mm (LxWxH)
- 2) Visible light-blocking resin (<750nm)
- 3) Supports lead-free solders
- 4) RoHS directive

●Outline



●Dimensions (Unit : mm)



●Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse voltage	V_R	60	V
Power dissipation	P_D	30	mW
Operating temperature	T_{opr}	-40 to +85	°C
Storage temperature	T_{stg}	-40 to +100	°C
Soldering temperature	T_{sd}	260	°C *1

*1 Reflow solder profile

●Electrical specification (T_a = 25°C)

Parameter	Symbol	Conditions	Values			Unit	
			Min.	Typ.	Max.		
Forward voltage	V _F	I _F =50mA	-	1.1	-	V	
Reverse dark current	I _d	V _R =10V	-	0.5	6	nA	
Reverse light current	I _{ra}	E _e =1mW/cm ² V _R =5V, λ=940nm	6	-	10	μA	
Reverse breakdown voltage	V _{BR}	E _e =0mW/cm ² I _R =100μA	60	-	-	V	
Capacitance	C _j	E _e =0mW/cm ² V _R =5V, f=1MHz	-	1.5	-	pF	
Peak emission wavelength	λ _p		-	940	-	nm	
Spectrum half width	λ _{0.5}		800 to 1050			nm	
Half angle	θ 1/2		-	±60	-	deg	
Response time	Rise time	tr	V _R =10V, R _L =1kΩ λ=850nm	-	100	-	ns
	Fall time	tf		-	100	-	

●Electrical and optical characteristics curves

Fig.1 Illuminance vs. Photocurrent

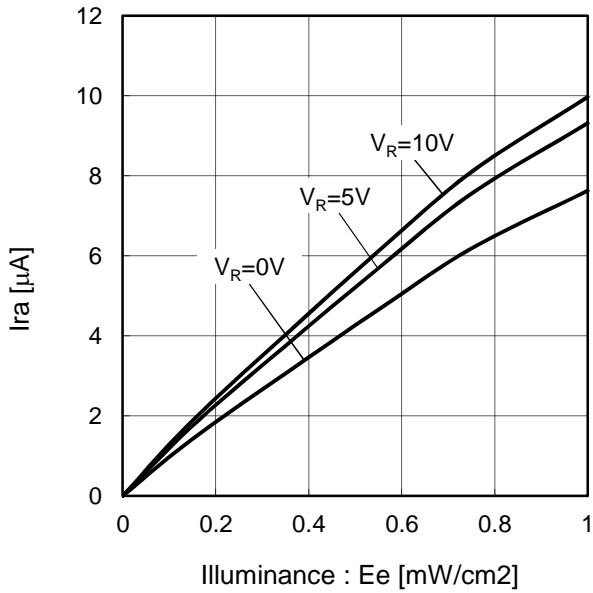


Fig.2 Reverse Voltage vs. Photocurrent

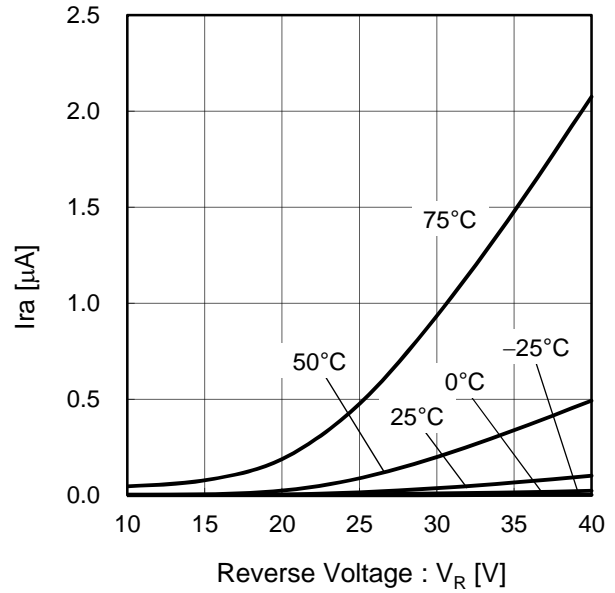


Fig.3 Forward Voltage vs. Forward Current

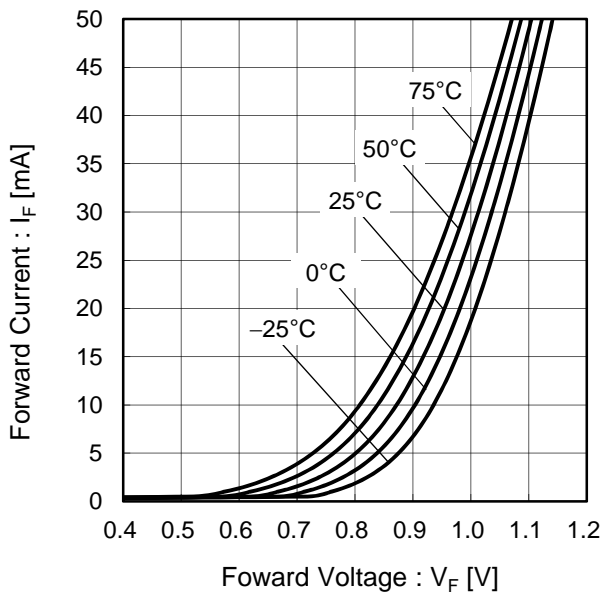
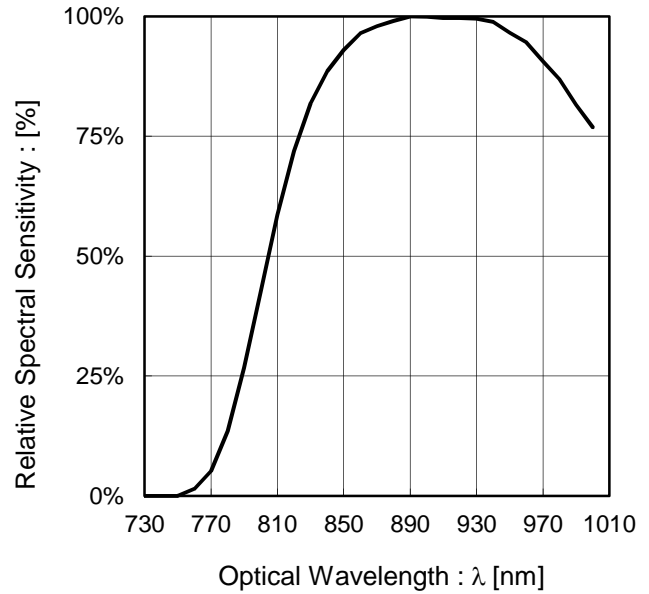
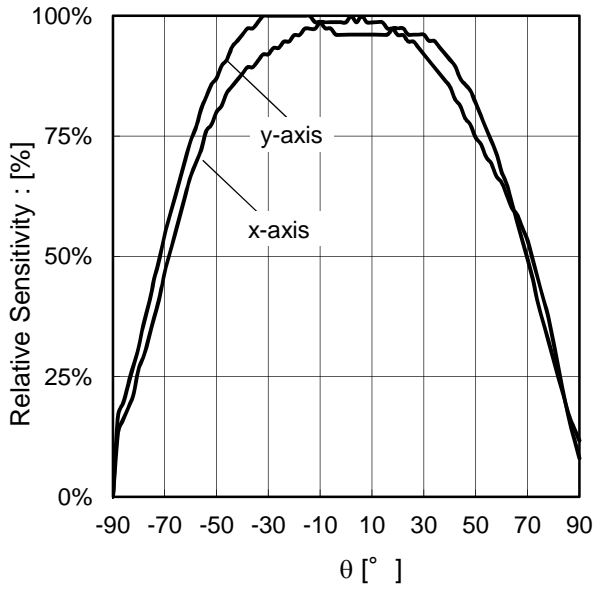


Fig.4 Spectral Sensitivity



●Electrical and optical characteristics curves

Fig.5 Radiant Intensity



Notes

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