

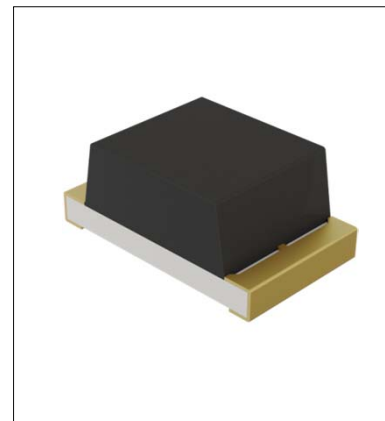
●Applications

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

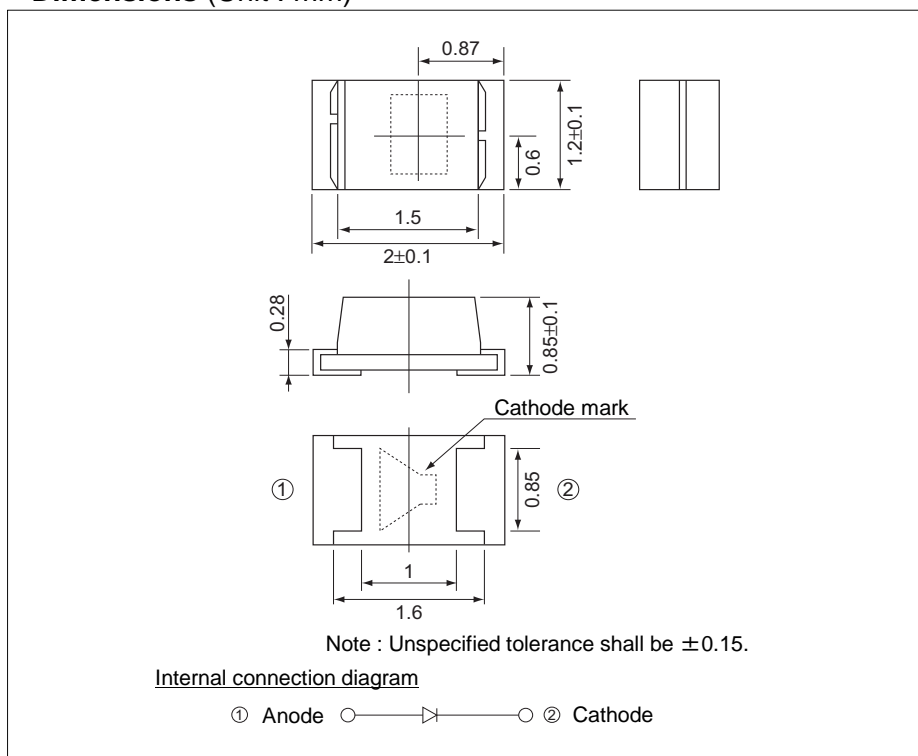
●Features

- 1) Dimensions 2.0×1.2×0.85mm (L×W×H)
- 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	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +100	$^\circ\text{C}$
Soldering temperature	T_{sd}	260	$^\circ\text{C}^{*1}$

*1 Reflow solder profile

●Electrical specification ($T_a = 25^\circ\text{C}$)

Parameter		Symbol	Conditions	Values			Unit
				Min.	Typ.	Max.	
Forward voltage		V_F	$I_F = 50\text{mA}$	-	1.1	-	V
Reverse dark current		I_d	$V_R = 10\text{V}$	-	0.5	6	nA
Reverse light current		I_{ra}	$E_e = 1\text{mW/cm}^2$ $V_R = 5\text{V}, \lambda = 940\text{nm}$	6	-	10	μA
Reverse breakdown voltage		V_{BR}	$E_e = 0\text{mW/cm}^2$ $I_R = 100\mu\text{A}$	60	-	-	V
Capacitance		C_j	$E_e = 0\text{mW/cm}^2$ $V_R = 5\text{V}, f = 1\text{MHz}$	-	1.5	-	pF
Peak emission wavelength		λ_p		-	940	-	nm
Spectrum half width		$\lambda_{0.5}$		800 to 1050			nm
Half angle		$\theta_{1/2}$		-	± 60	-	deg
Response time	Rise time	t_r	$V_R = 10\text{V}, R_L = 1\text{k}\Omega$ $\lambda = 850\text{nm}$	-	100	-	ns
	Fall time	t_f		-	100	-	

●Electrical and optical characteristics curves

Fig.1 Illuminance vs. Photocurrent

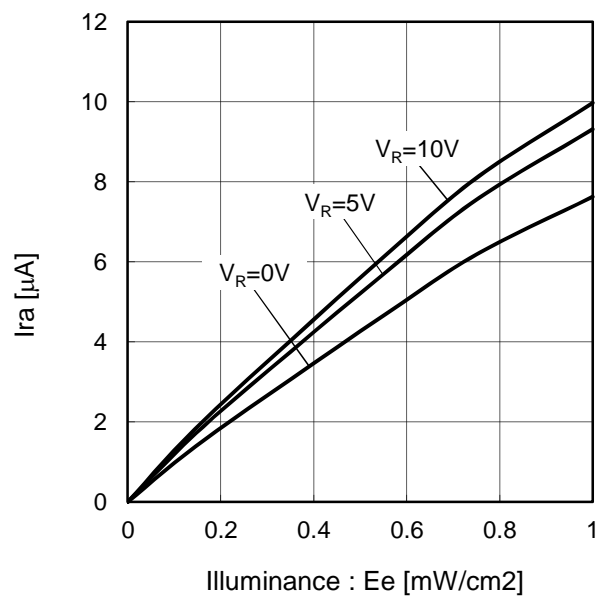


Fig.2 Reverse Voltage vs. Photocurrent

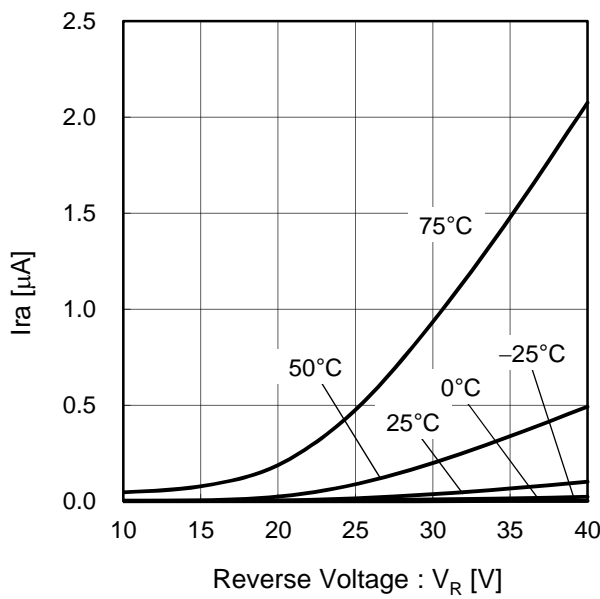


Fig.3 Forward Voltage vs. Forward Current

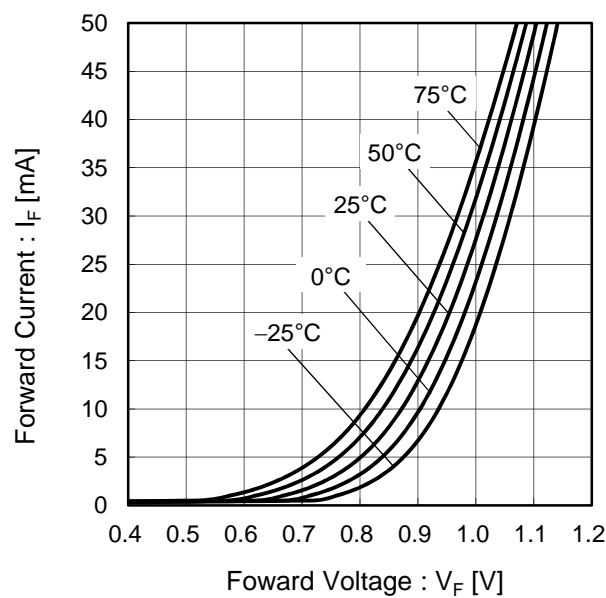
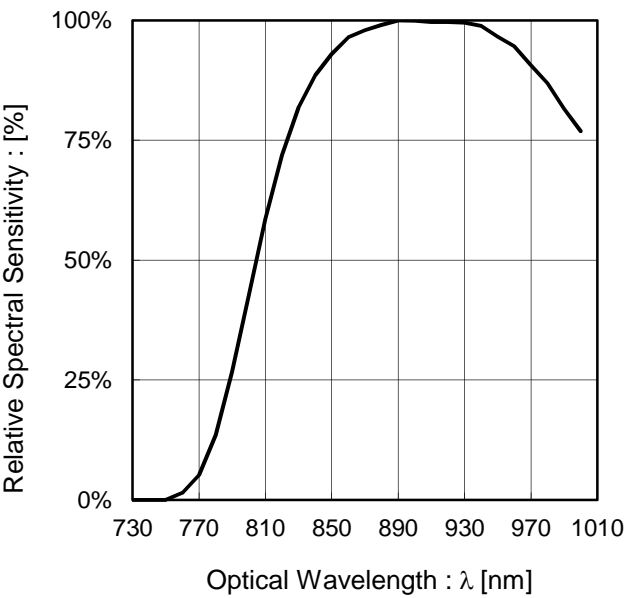
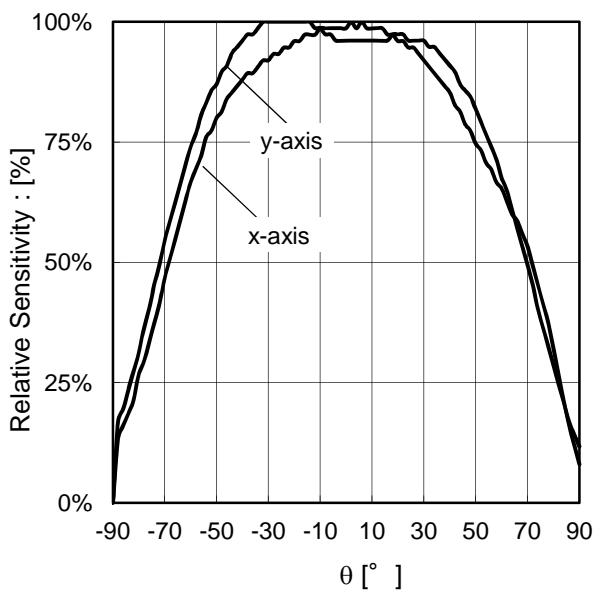


Fig.4 Spectral Sensitivity



●Electrical and optical characteristics curves

Fig.5 Radiant Intensity



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