

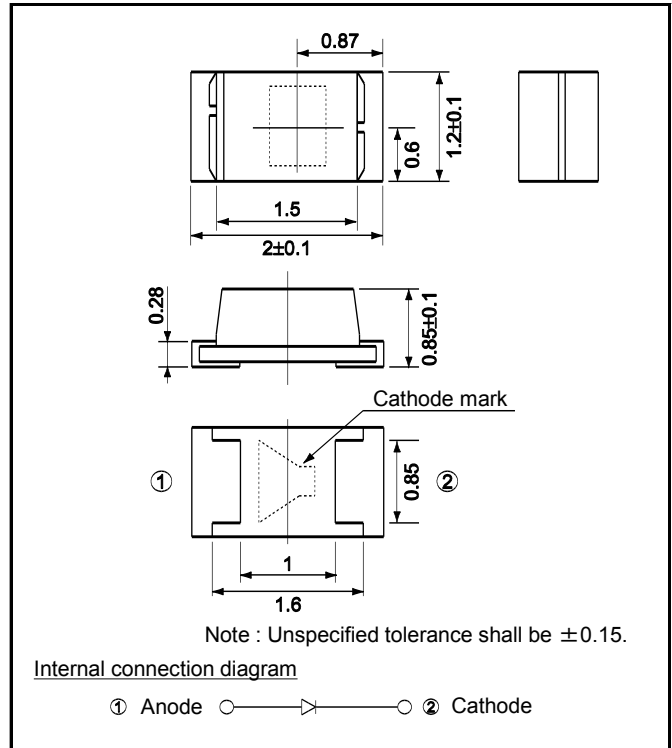
●Applications

- 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

●Dimensions (Unit : mm)



●Absolute maximum ratings (Ta = 25°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 (Ta = 25°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 characteristic curves

Fig.1 Illuminance vs. Relative Photocurrent

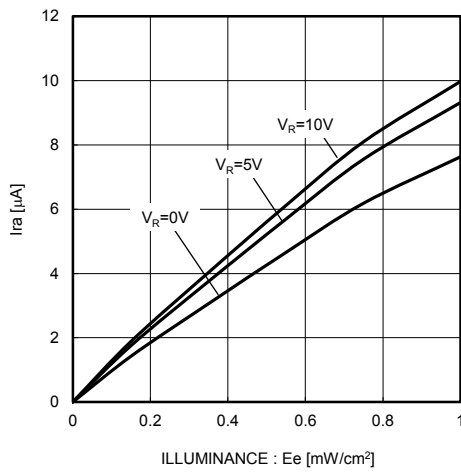


Fig.2 Reverse Voltage vs. Photocurrent

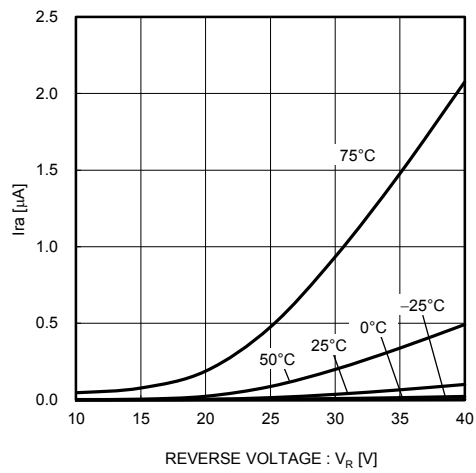


Fig.3 Forward Voltage vs. Forward Current

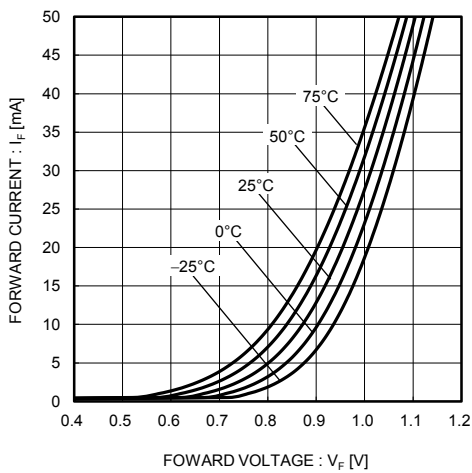


Fig.4 Spectral Sensitivity

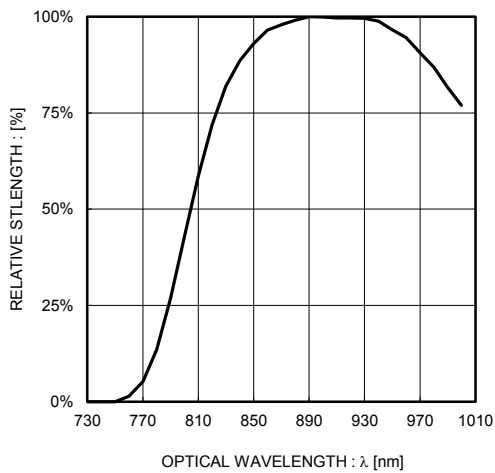
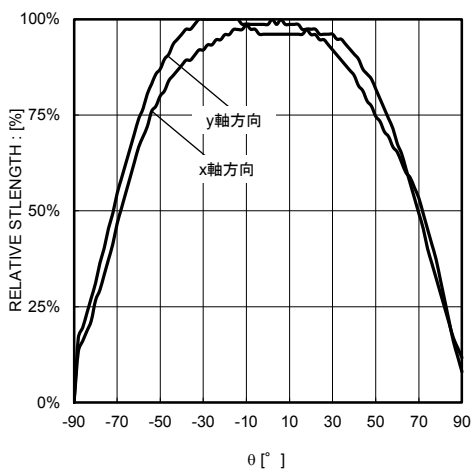


Fig.5 Directivity



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