

Features

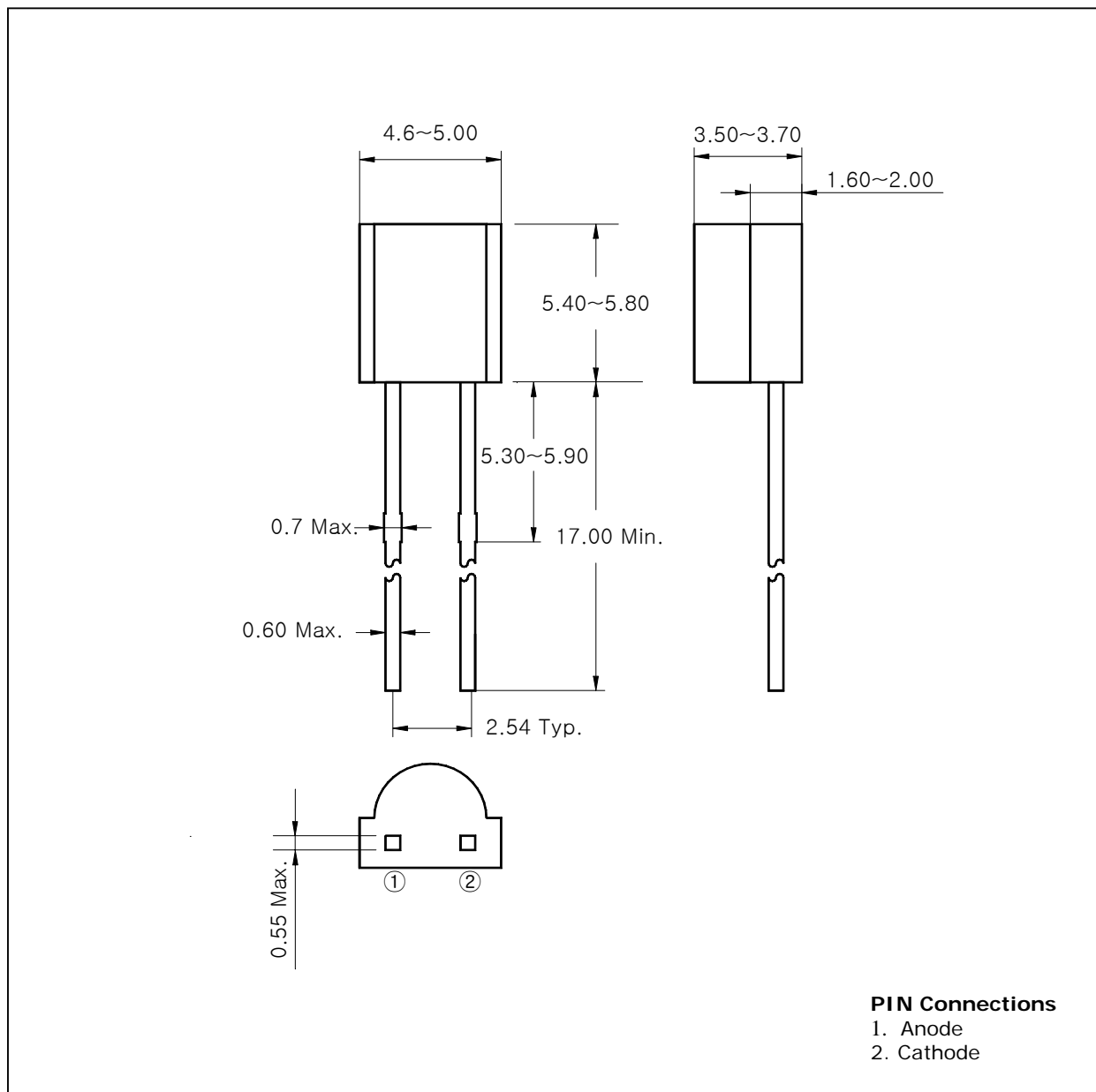
- Peak sensitivity wavelength matching with infrared LED($\lambda_p=950\text{nm}$)
- 4.8mm x 5.6mm side view package
- Black colored visible light cut-off lens

Application

- Various kinds of remote control systems

Outline Dimensions

unit : mm



PIN Connections

1. Anode
2. Cathode

Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Reverse voltage	V_R	40	V
Power dissipation	P_D	170	mW
Operating temperature range	T_{opr}	-20 ~ 70	°C
Storage temperature range	T_{stg}	-25 ~ 85	°C
*1 Soldering temperature	T_{sol}	260°C for 10 seconds	

*1. Keep the distance more than 2.0mm from PCB to the bottom of Photo Diode package

Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Short circuit current	I_{SC}	$V_R=5V, {}^*2E_e=6mW/cm^2$	-	40	-	uA
Dark current	I_D	$V_R=10V, E_e=0$	-	-	50	nA
Capacitance	C_T	$V_R=10V, f=1MHz$	-	10	-	pF
Photosensitivity spectral range	λ	-	840 ~ 1,050			nm
Peak sensitivity wavelength	λ_P	-	-	950	-	nm
Half angle	$\theta^{1/2}$	-	-	±55	-	deg

*2. E_e : Irradiance by infrared LED light source ($\lambda_P=940nm$)

Characteristic Diagrams

Fig. 1 $I_{SC} - E_e$

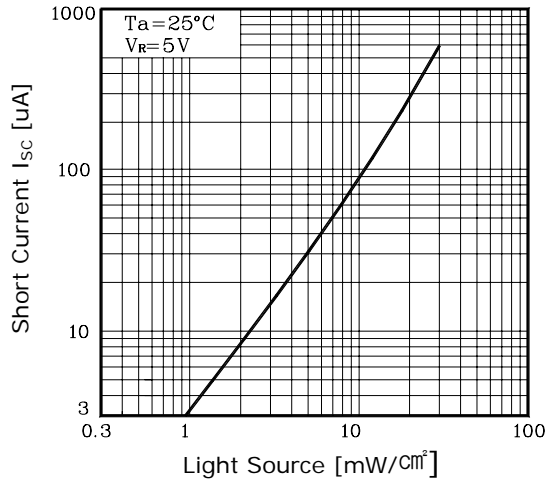


Fig. 2 $I_D - T_a$

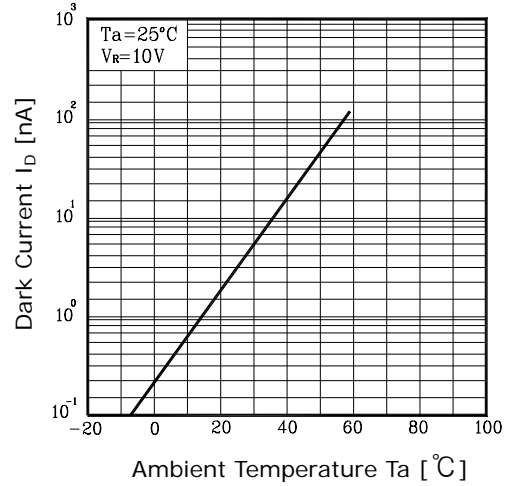


Fig. 3 $C_T - V_R$

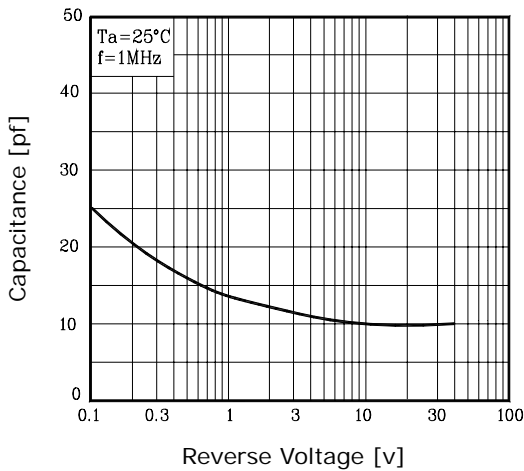


Fig. 4 $I_D - V_R$

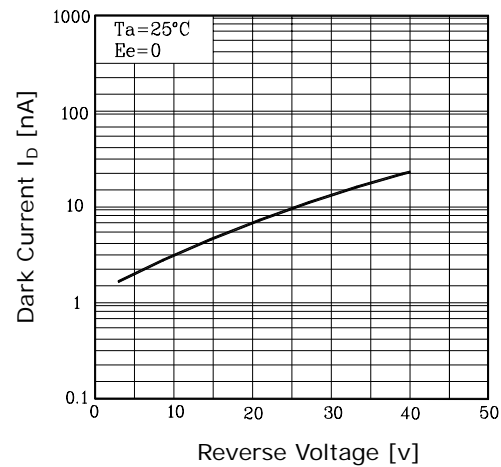


Fig. 5 Spectrum Sensitivity

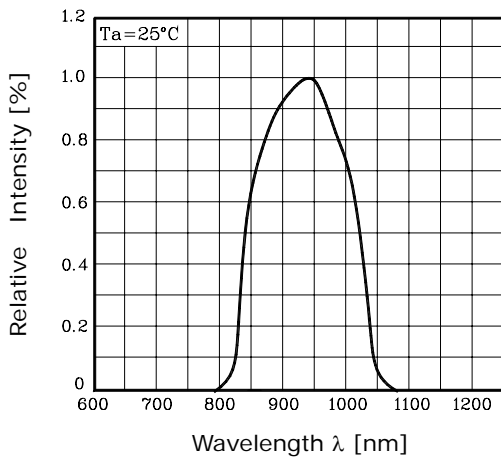
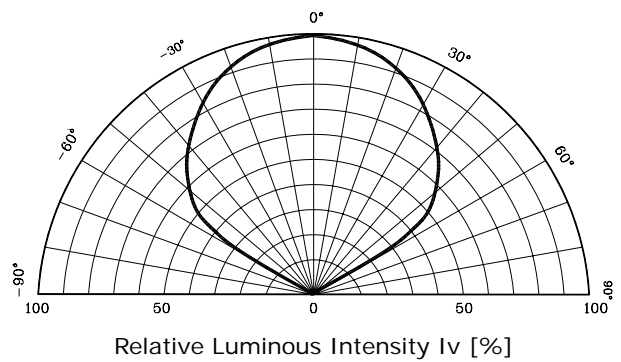


Fig. 6 Radiation Diagram



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