



SPI5342-H

Photo Diode

Features

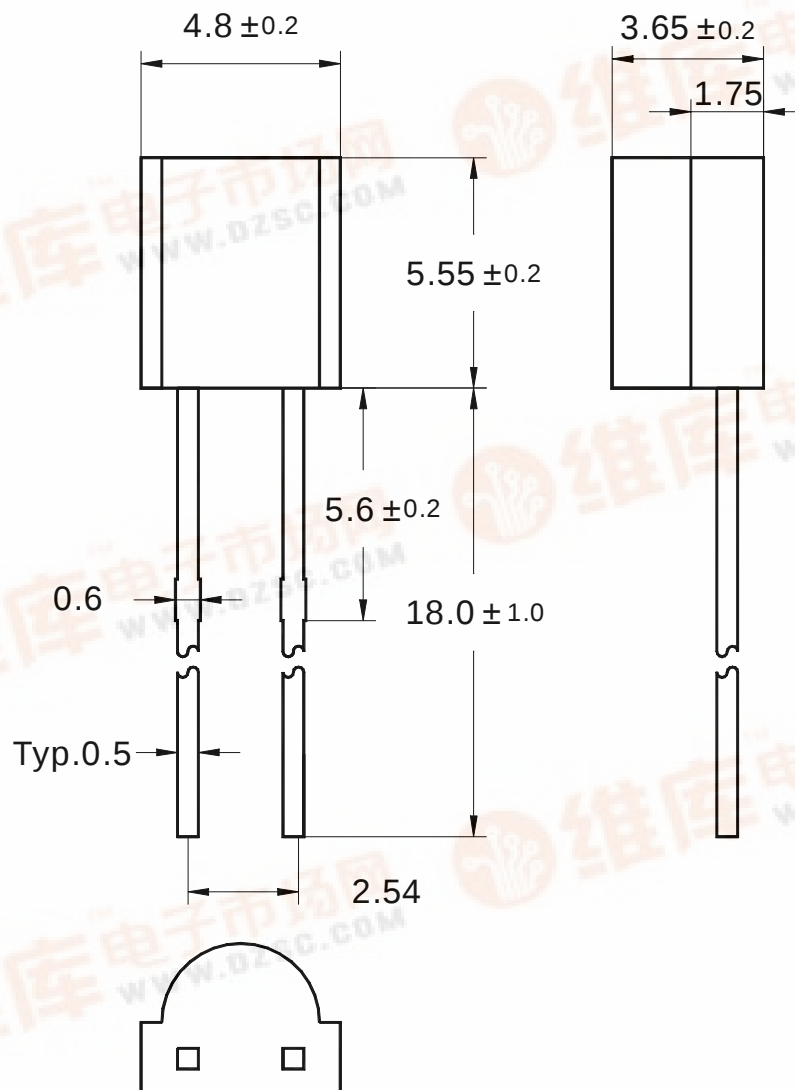
- Peak sensitivity wavelength matching with infrared LED($\lambda_p=950\text{nm}$)
- 4.8mm × 5.5mm side view package
- Colorless transparency lens type

Application

- Infrared remote controllers for TVs, VCRs, Audio equipment etc

Outline Dimensions

unit : mm



PIN Connections

1. Anode
2. Cathode

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Reverse Voltage	V_R	40	V
Power Dissipation	P_D	170	mW
Operating Temperature	T_{opr}	-20 70	
Storage Temperature	T_{stg}	-25 85	
*1Soldering Temperature	T_{sol}	260 for 5 seconds	

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

Electrical Characteristics

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
*1Short Circuit Current	I_{SC}	$E_e = 6\text{mW}/\text{cm}^2$	-	50	-	uA
Dark Current	I_D	$V_R = 10\text{V}$	-	50	-	nA
Capacitance	C_t	$V_R = 10\text{V}$, $f = 1\text{MHz}$	-	10	-	pF
Spectral Sensitivity	$\Delta \lambda$	-	430 ~ 1,050			nm
Peak Sensitivity Wavelength	λ_p	-	-	940	-	nm
Half angle	$\theta^{1/2}$	-	-	± 55	-	deg

*1. E_e : Irradiance by infrared LED light source($\lambda_p = 940\text{nm}$)

Characteristic Diagrams

Fig. 1 $I_{SC} - E_e$

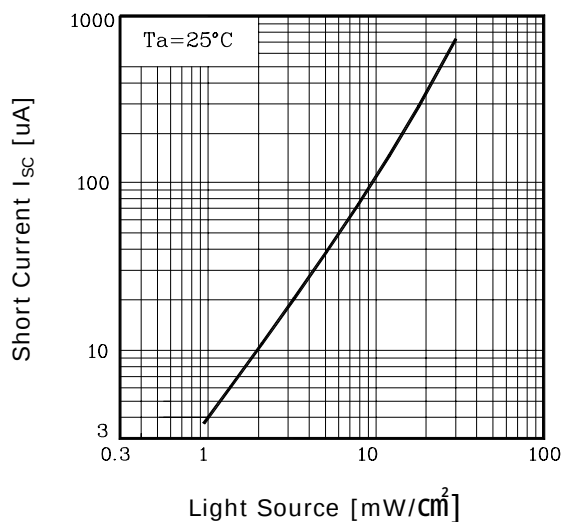


Fig. 2 $I_D - T_a$

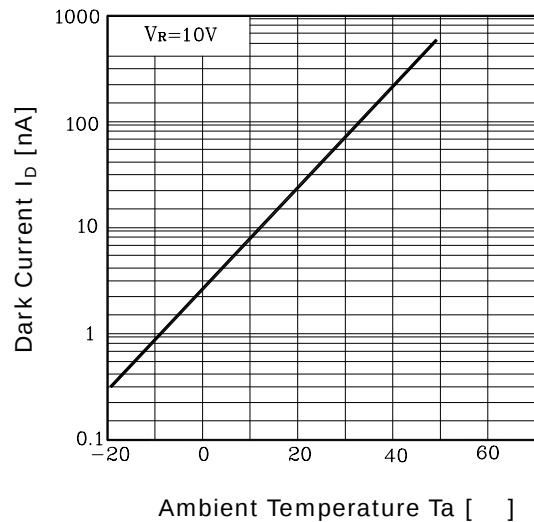


Fig. 3 $C_t - V_R$

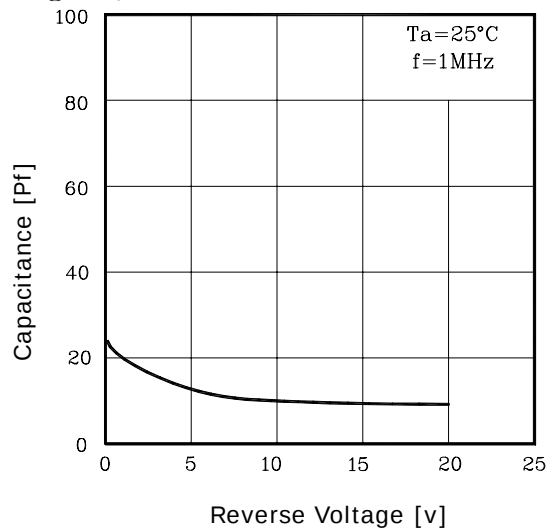


Fig.4 $I_D - V_R$

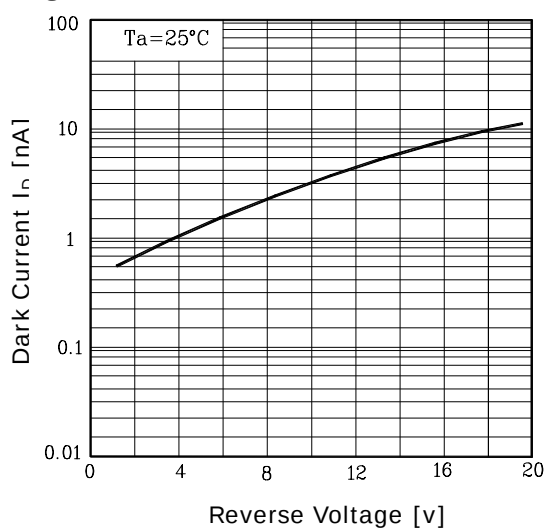


Fig.5 Spectrum Sensitivity

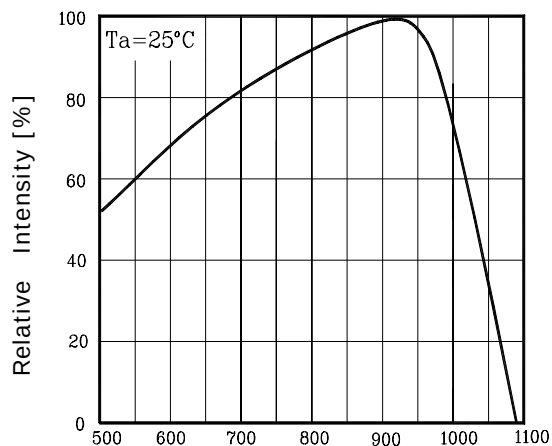


Fig. 5-2 Radiation Diagram

