

Features

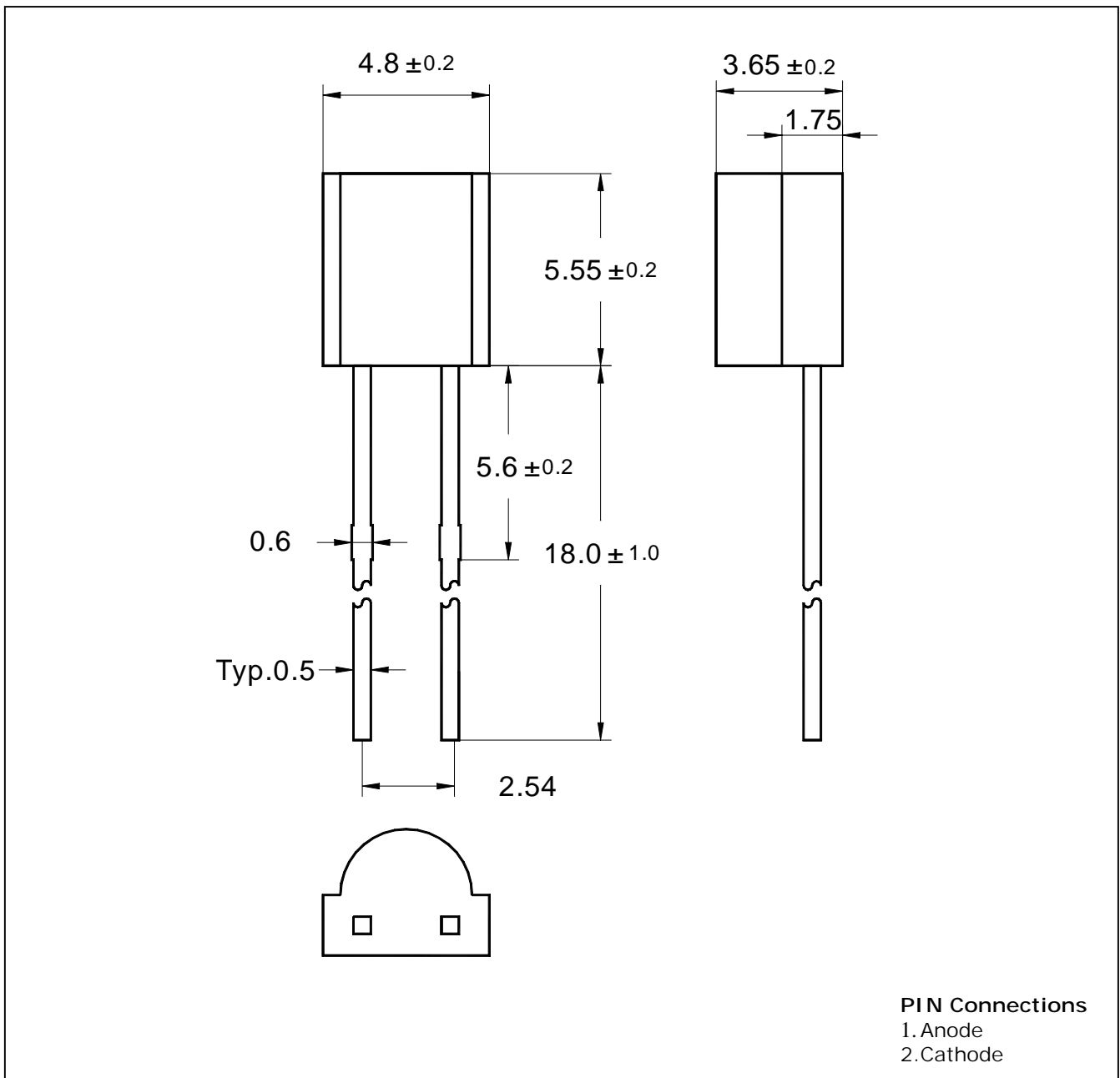
- Peak sensitivity wavelength matching with infrared LED($\lambda_p=950\text{nm}$)
- 4.8mm \times 5.5mm side view package
- Black colored visible light cut-off lens

Application

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

Outline Dimensions

unit : mm



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} | $E_e=6mW/cm^2$ | - | 45 | - | μA |
| Dark Current | I_D | $V_R=10V$ | - | 50 | - | nA |
| Capacitance | C_t | $V_R=10V, f=1MHz$ | - | 10 | - | pF |
| Spectral Sensitivity | | - | 840 ~ 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($\lambda_p=940nm$)

Characteristic Diagrams

Fig. 1 $I_{SC} - E_e$

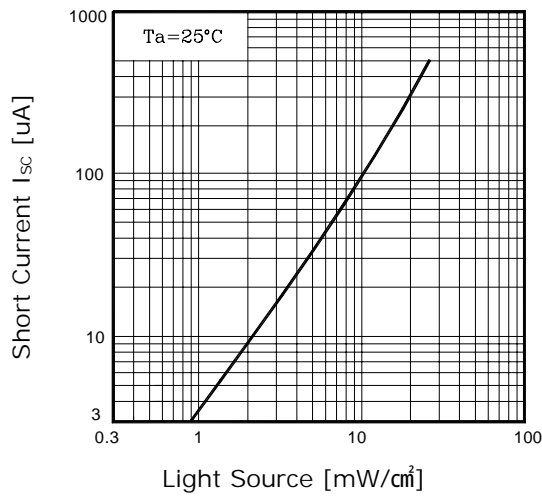


Fig. 2 $I_D - T_a$

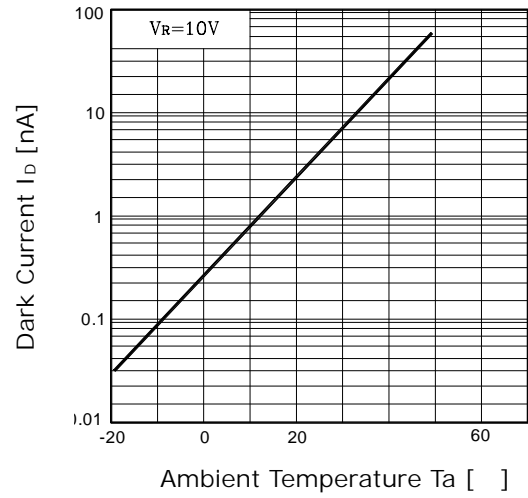


Fig. 3 $C_t - V_R$

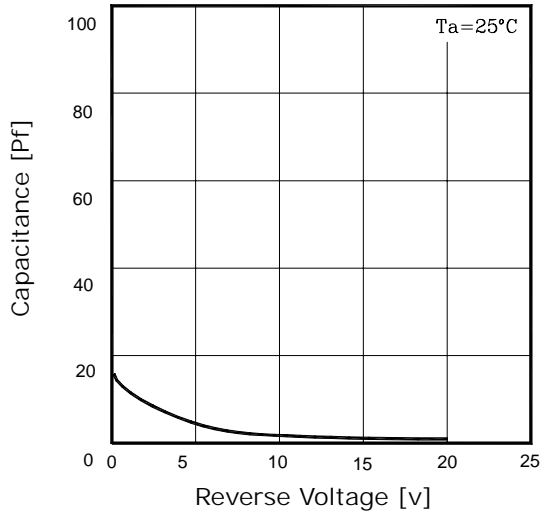


Fig. 4 $I_D - V_R$

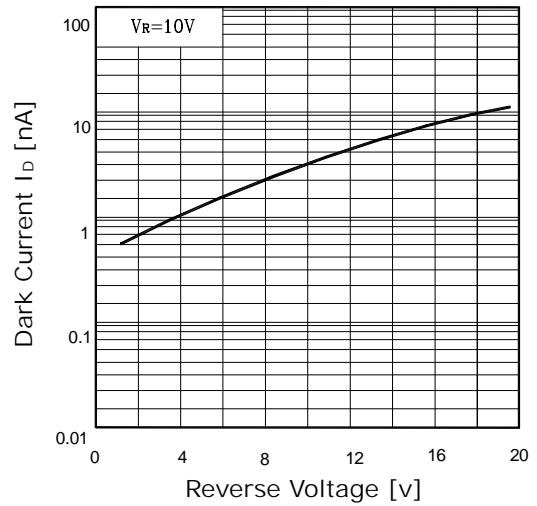


Fig. 5 Spectrum Sensitivity

