

Features

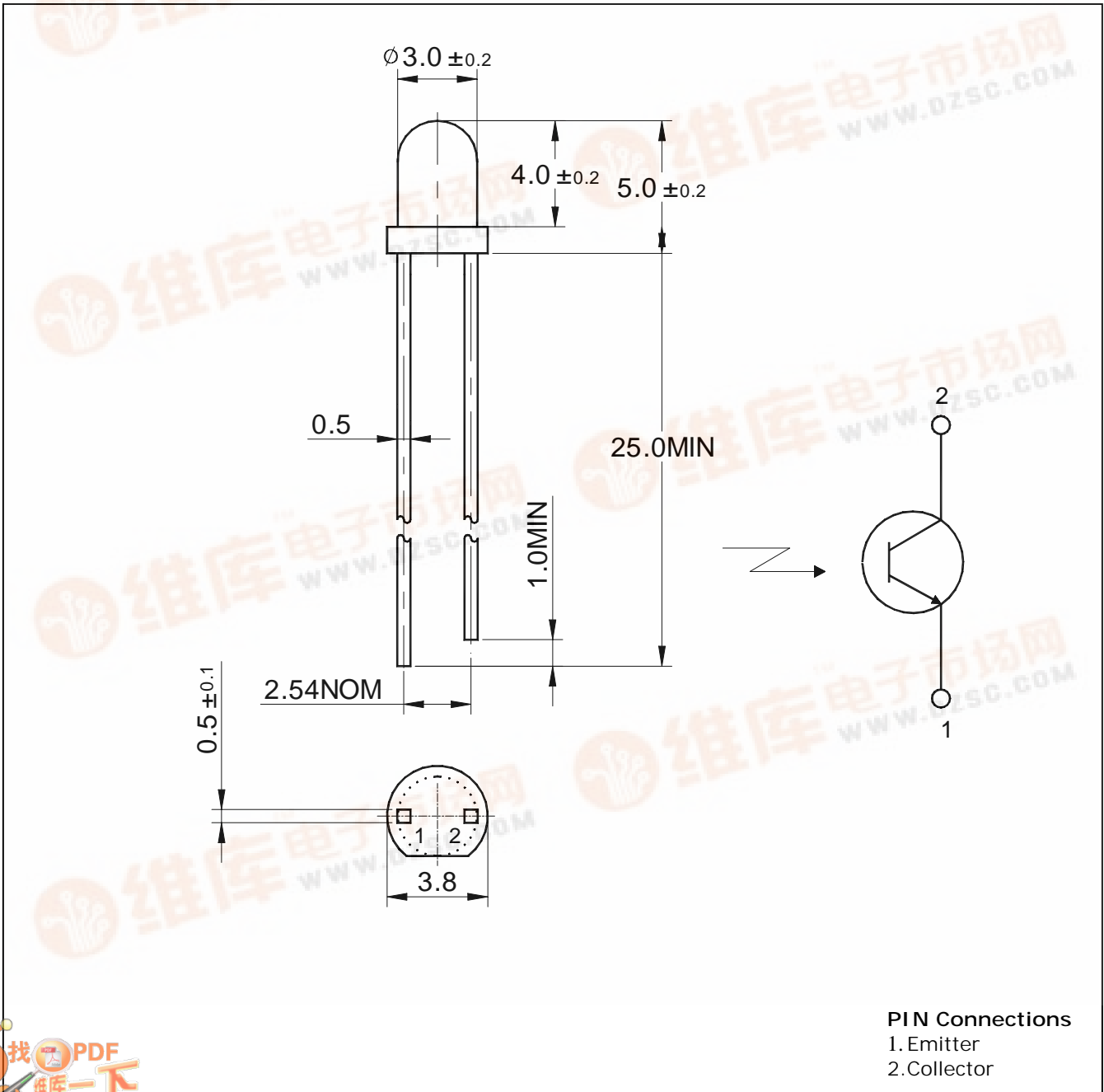
- $\phi 3\text{mm}$ (T-1) all plastic mold type
- Colorless transparency lens

Features

- VCR, Camcorders
- Floppy disk drivers
- Optical detectors

Outline Dimensions

unit : mm



PIN Connections
1. Emitter
2. Collector



Absolute maximum ratings

| Characteristic | Symbol | Ratings | Unit |
|-----------------------------|-----------|-------------------|------|
| Collector-Emitter Voltage | V_{CEO} | 35 | V |
| Emitter-Collector Voltage | V_{ECO} | 6 | V |
| Collector Current | I_C | 20 | mA |
| Collector Power Dissipation | P_D | 75 | mW |
| Operating Temperature | T_{opr} | -25 85 | |
| Storage Temperature | T_{stg} | -30 100 | |
| *1 Soldering 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 |
|------------------------------------|----------------|------------------------------------|------------|----------|-----|------|
| Current Dark Current | I_{CEO} | $V_{CEO}=10V, E_e=0$ | - | 0.05 | 0.5 | uA |
| *3 Light Current | I_{CEL} | $V_{CE}=5V, E_e=1mW/cm^2$ | - | 4.5 | - | mA |
| Current-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=0.5mA, E_e=1mW/cm^2$ | - | 0.2 | - | V |
| Switching Time | Rise Time | $V_{CC}=10V, I_C=1mA$ $R_1=100$ | - | 2.5 | - | us |
| | Fall Time | | | t_f | | |
| Spectral Sensitivity | | - | 700 ~ 1000 | | | nm |
| Peak Sensitivity Wavelength | λ_p | - | - | 880 | - | nm |
| Half angle | $\theta_{1/2}$ | $I_F=20mA$ | - | ± 20 | - | deg |

*1. Tolerance = $\pm 30\%$

Characteristic Diagrams

Fig. 1 $I_{CEL} - E_e$

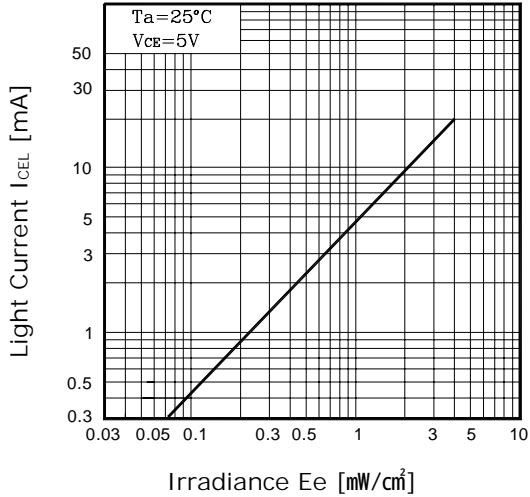


Fig. 2 $I_{CEL} - V_{CE}$

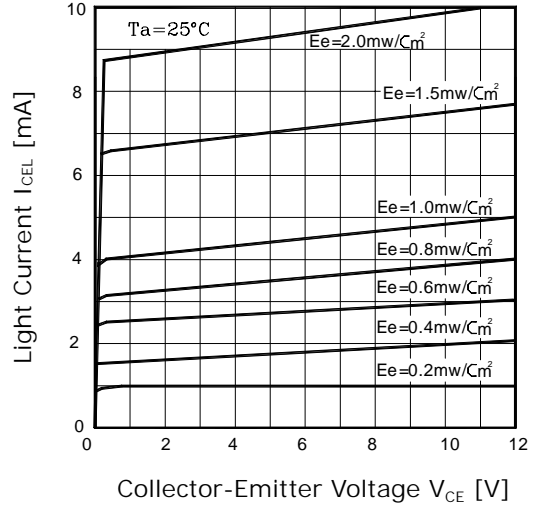


Fig. 3 $P_D - T_a$

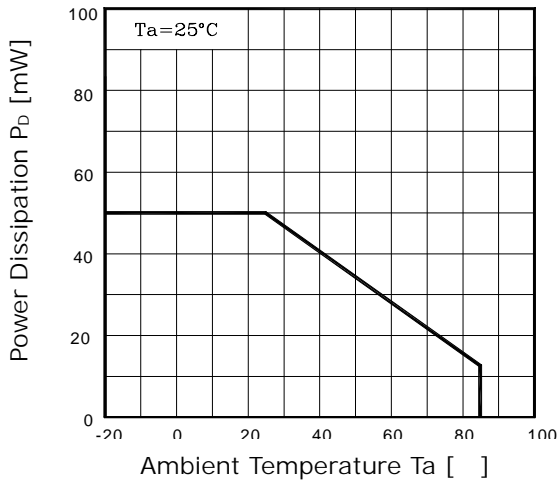


Fig. 4 $I_{CEO} - T_a$

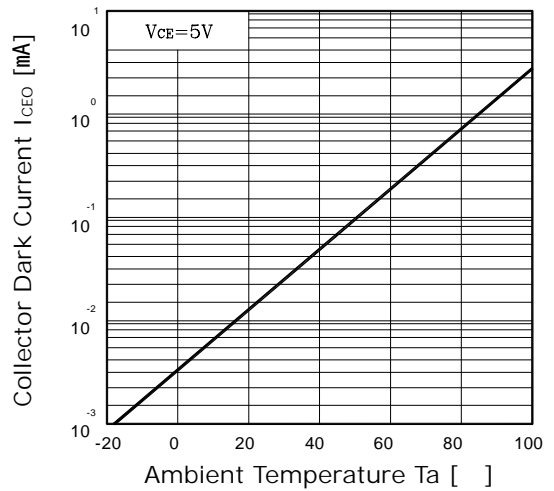


Fig. 5 Spectrum Sensitivity

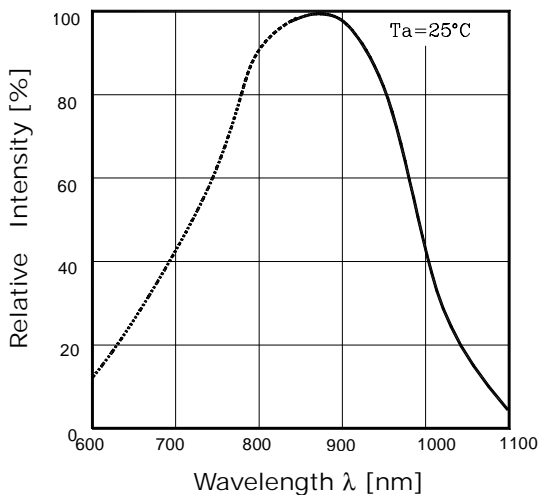


Fig. 5 Sensitivity Diagram

