

# **LG-ITR2C-502725-3.1**

## **DATA SHEET**

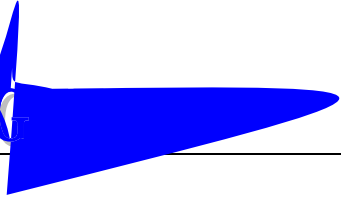
SPEC.NO.: SZ18080411  
DATE: 2021/02/20  
REV. A/4

Approved By:

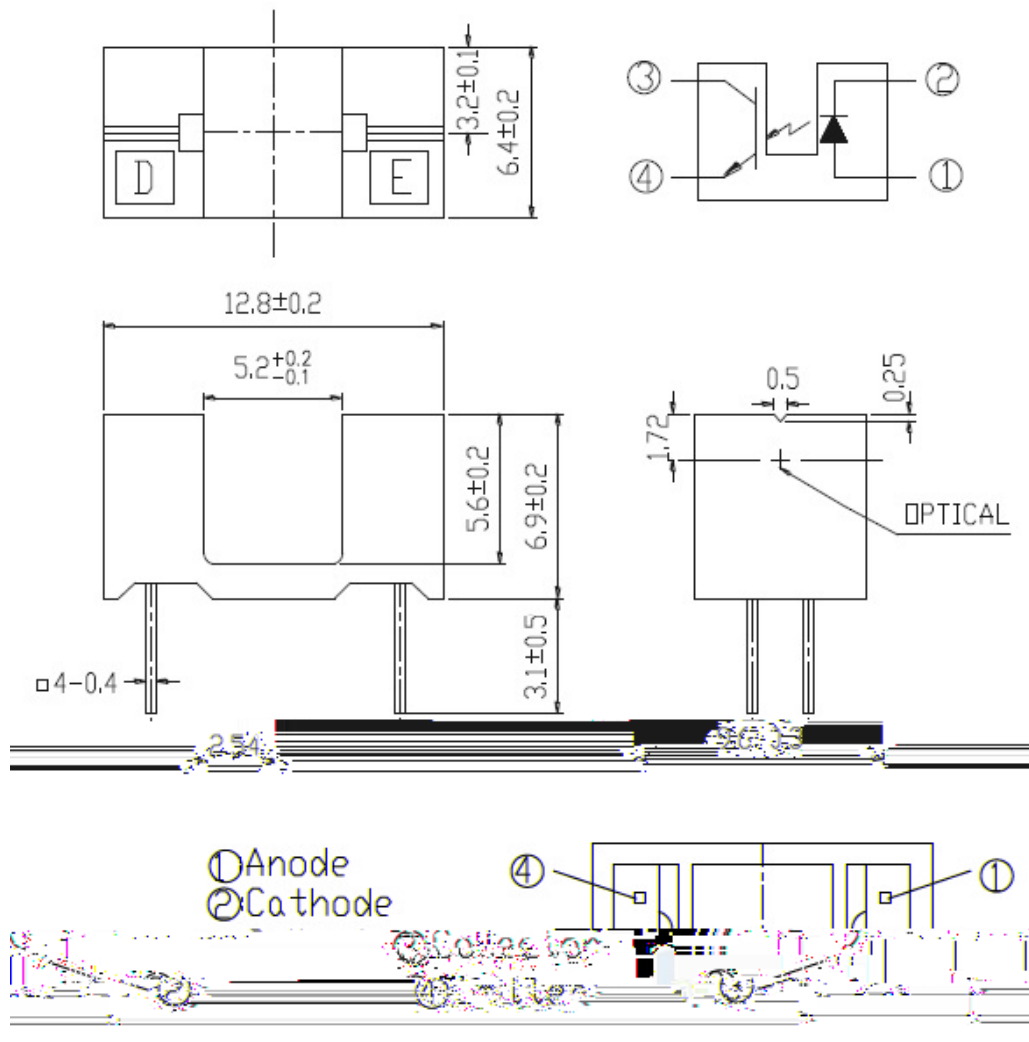
Checked By:

Prepared By:

LIC



## Package Dimensions



### Notes:

1. All dimensions are in millimeters.
2. Tolerances unless dimensions  $\pm 0.2$  mm.

### Absolute Maximum Ratings (Ta=25 )

| Parameter  |  | Symbol    | Ratings  | Unit |
|--|--|-----------|----------|------|
| Input  | Power Dissipation at(or below)<br>25 Free Air Temperature    | $P_d$     | 75       | mW   |
|  | Reverse Voltage  | $V_R$     | 5        | V    |
|  | Forward Current  | $I_F$     | 50       | mA   |
|  | Peak Forward Current(*1)<br>Pulse width 100μs, Duty cycle=1% | $I_{FP}$  | 1        | A    |
| Output   | Collector Power Dissipation                                  | $P_C$     | 75       | mW   |
|  | Collector Current  | $I_C$     | 20       | mA   |
|  | Collector-Emitter Voltage                                    | $V_{CEO}$ | 30       | V    |
|  | Emitter-Collector Voltage                                    | $V_{ECO}$ | 5        | V    |
| Operating Temperature  |  | $T_{opr}$ | -25~ +85 |      |
| Storage Temperature  |  | $T_{stg}$ | -40~ +85 |      |
| Lead Soldering Temperature (*2)<br>(1/16 inch from body for 5 seconds) |  | $T_{sol}$ | 260      |      |

(\*1)  $t_w = 100 \mu\text{sec.}$ ,  $T = 10 \text{ msec.}$  (\*2)  $t = 5 \text{ Sec.}$

### Electro-Optical Characteristics (Ta=25 )

| Parameter |                        | Symbol      | Min. | Typ. | Max. | Unit | Condition                           |
|-----------|------------------------|-------------|------|------|------|------|-------------------------------------|
| Input     | Forward Voltage        | $V_F$       | ---  | 1.2  | 1.6  | V    | $I_F = 20\text{mA}$                 |
|           | Reverse Current        | $I_R$       | ---  | ---  | 10   | μA   | $V_R = 5\text{V}$                   |
|           | Peak Wavelength        | $\lambda_p$ | --   | 940  | ---  | nm   | $I_F = 20\text{mA}$                 |
| Output    | Collector Dark Current | $I_{CEO}$   | ---  | ---  | 100  | nA   | $V_{CE} = 10\text{V}$ ,<br>$E_{0A}$ |

## Typical Electrical/Optical/Characteristics Curves for IR

Fig.1 Forward Current vs. Ambient Temperature

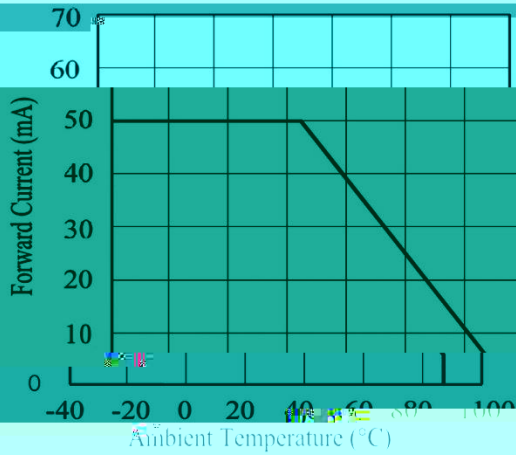


Fig.2 Spectral Distribution

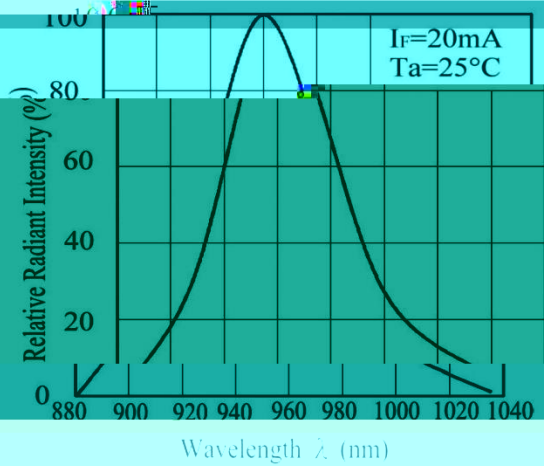


Fig.3 Forward Current vs. Forward Voltage

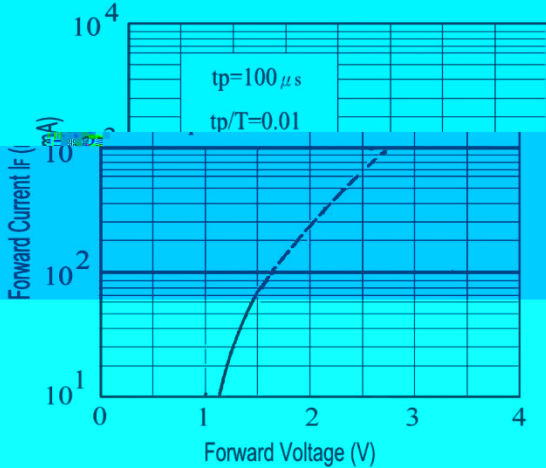
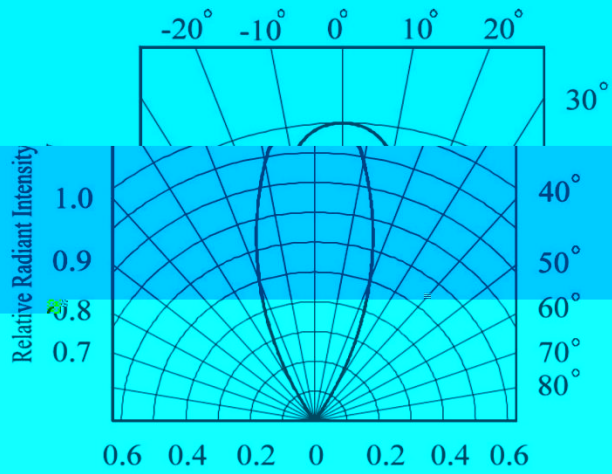


Fig.4 Relative Radiant Intensity vs. Angular Displacement



## Typical Electrical/Optical/Characteristics Curves for PT

Fig.1 Spectral Sensitivity

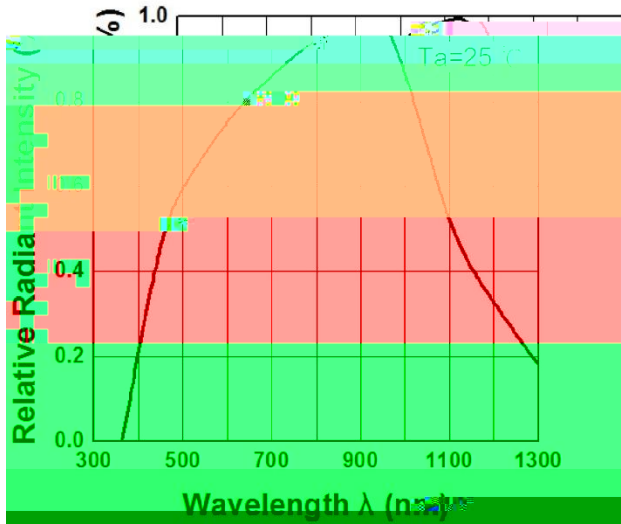


Fig.2 Collector Current vs. Irradiance

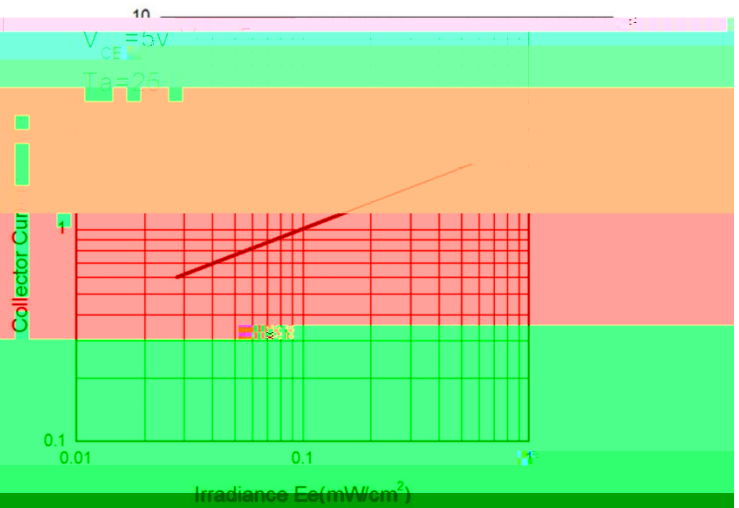


Fig.3 Collector Current vs. Collector Current

