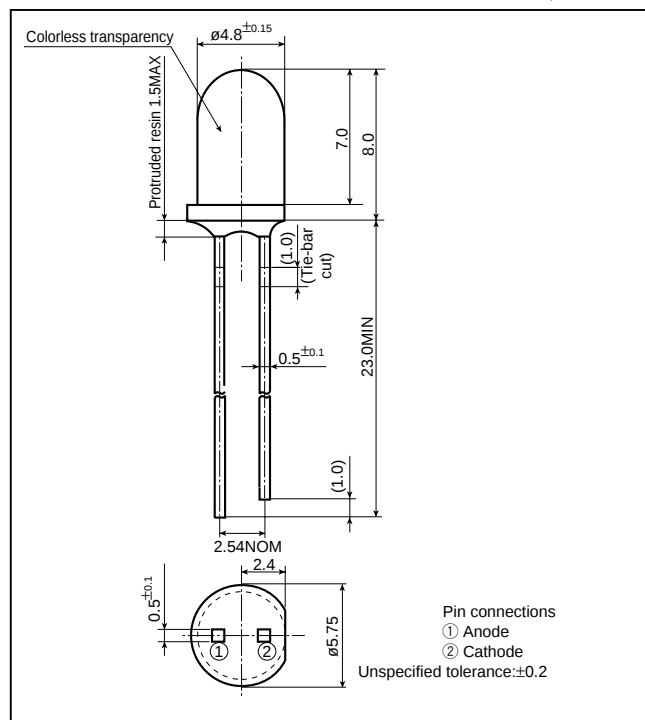


## GL5Z□302B0S series

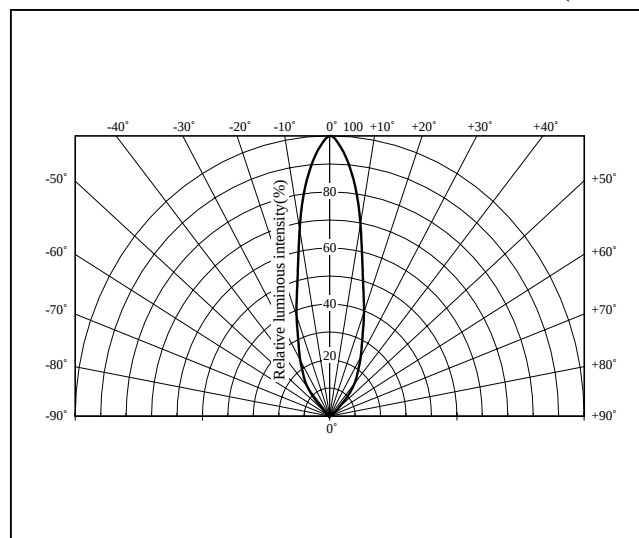
Viewing Angle: 30° (2θ1/2) ø5mm,  
Cylinder Type, Colorless  
Transparency Super-luminosity  
LED Lamps for Outdoor Use

## ■ Outline Dimensions

(Unit : mm)



## ■ Directive Characteristics

(T<sub>a</sub>=25°C)

## ■ Absolute Maximum Ratings

(T<sub>a</sub>=25°C)

| Model No.   | Emitting color | Material        | Power dissipation<br>P<br>(mW) | Forward current<br>I <sub>F</sub><br>(mA) | Peak forward current<br>I <sub>FM</sub> *1<br>(mA) | Derating factor<br>(mA/°C) |       | Reverse voltage<br>V <sub>R</sub><br>(V) | Operating temperature<br>T <sub>opr</sub><br>(°C) | Storage temperature<br>T <sub>stg</sub><br>(°C) | Soldering temperature<br>T <sub>sol</sub> *2<br>(°C) |
|-------------|----------------|-----------------|--------------------------------|-------------------------------------------|----------------------------------------------------|----------------------------|-------|------------------------------------------|---------------------------------------------------|-------------------------------------------------|------------------------------------------------------|
|             |                |                 |                                |                                           |                                                    | DC                         | Pulse |                                          |                                                   |                                                 |                                                      |
| GL5ZR302B0S | Red            | AlGaInP on GaAs | 130                            | 50                                        | 100                                                | 0.67                       | 1.33  | 5                                        | -40 to +85                                        | -40 to +100                                     | 260                                                  |
| GL5ZJ302B0S | Orange         | AlGaInP on GaAs | 130                            | 50                                        | 100                                                | 0.67                       | 1.33  | 5                                        | -40 to +85                                        | -40 to +100                                     | 260                                                  |
| GL5ZS302B0S | Sunset orange  | AlGaInP on GaAs | 130                            | 50                                        | 100                                                | 0.67                       | 1.33  | 5                                        | -40 to +85                                        | -40 to +100                                     | 260                                                  |
| GL5ZV302B0S | Amber          | AlGaInP on GaAs | 130                            | 50                                        | 100                                                | 0.67                       | 1.33  | 5                                        | -40 to +85                                        | -40 to +100                                     | 260                                                  |
| GL5ZE302B0S | Yellow-green   | AlGaInP on GaAs | 130                            | 50                                        | 100                                                | 0.67                       | 1.33  | 5                                        | -40 to +85                                        | -40 to +100                                     | 260                                                  |
| GL5ZG302B0S | Green          | AlGaInP on GaAs | 130                            | 50                                        | 100                                                | 0.67                       | 1.33  | 5                                        | -40 to +85                                        | -40 to +100                                     | 260                                                  |

\*1 Duty ratio=1/10, Pulse width=0.1ms

\*2 5s or less(At the position of 1.6mm or more from the bottom face of resin package)

## ■ Electro-optical Characteristics

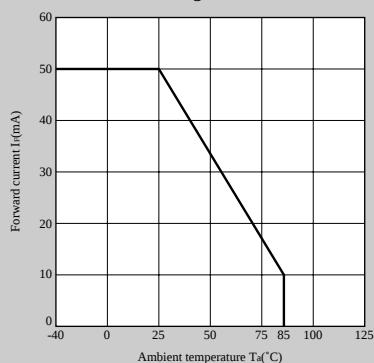
(I<sub>F</sub>=20mA, T<sub>a</sub>=25°C)

| Lens type              | Model No.   | Forward voltage<br>V <sub>F</sub> (V) |     | Peak emission wavelength<br>λ <sub>p</sub> (nm)<br>TYP | Dominant wavelength<br>λ <sub>d</sub> (nm)<br>TYP | Luminous intensity<br>I <sub>v</sub> (mcd)<br>TYP | Spectrum radiation bandwidth<br>Δλ(nm)<br>TYP | Reverse current            |                       | Terminal capacitance       |       | Page for characteristics diagrams |
|------------------------|-------------|---------------------------------------|-----|--------------------------------------------------------|---------------------------------------------------|---------------------------------------------------|-----------------------------------------------|----------------------------|-----------------------|----------------------------|-------|-----------------------------------|
|                        |             | TYP                                   | MAX |                                                        |                                                   |                                                   |                                               | I <sub>R</sub> (μA)<br>MAX | V <sub>R</sub><br>(V) | C <sub>t</sub> (pF)<br>TYP | (MHz) |                                   |
| Colorless transparency | GL5ZR302B0S | 2.1                                   | 2.6 | 647                                                    | 635                                               | 600                                               | 20                                            | 100                        | 4                     | 60                         | 1     | 96                                |
|                        | GL5ZJ302B0S | 2.1                                   | 2.6 | 627                                                    | 618                                               | 1 300                                             | 15                                            | 100                        | 4                     | 60                         | 1     | 96                                |
|                        | GL5ZS302B0S | 2.1                                   | 2.6 | 609                                                    | 605                                               | 1 700                                             | 15                                            | 100                        | 4                     | 60                         | 1     | 97                                |
|                        | GL5ZV302B0S | 2.1                                   | 2.6 | 591                                                    | 588                                               | 1 300                                             | 15                                            | 100                        | 4                     | 60                         | 1     | 98                                |
|                        | GL5ZE302B0S | 2.1                                   | 2.6 | 570                                                    | 570                                               | 300                                               | 15                                            | 100                        | 4                     | 60                         | 1     | 98                                |
|                        | GL5ZG302B0S | 2.1                                   | 2.6 | 560                                                    | 560                                               | 70                                                | 15                                            | 100                        | 4                     | 60                         | 1     | 99                                |

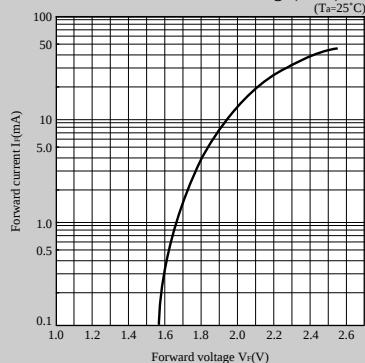
# Characteristics Diagrams

## ZR series

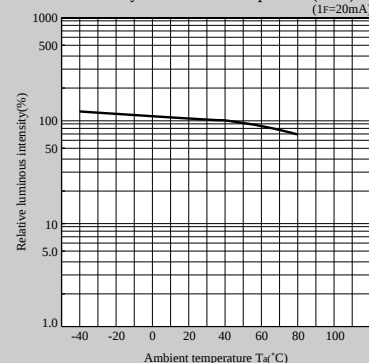
Forward Current Derating Curve



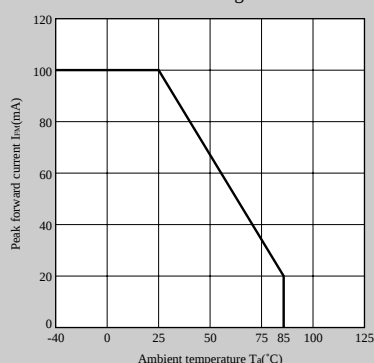
Forward Current vs. Forward Voltage(Note)



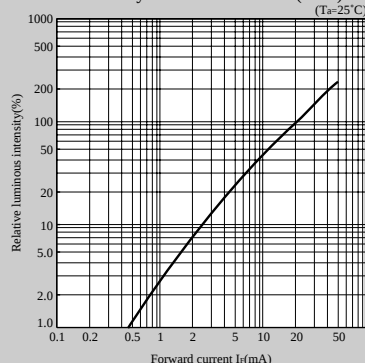
Luminous Intensity vs. Ambient Temperature(Note)



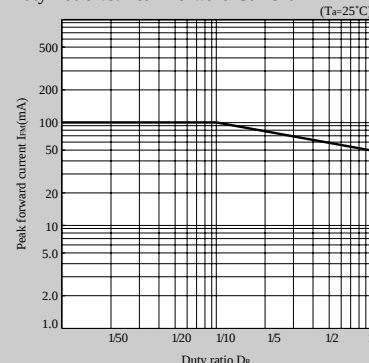
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

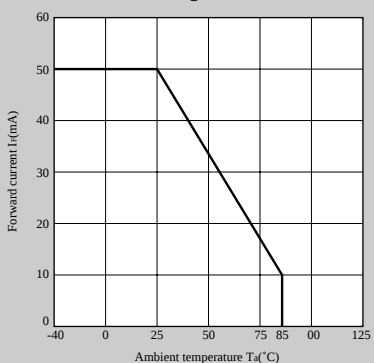


Duty Ratio vs. Peak Forward Current

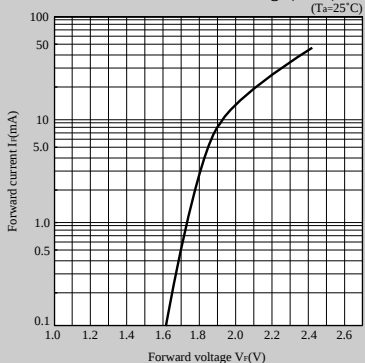


## ZJ series

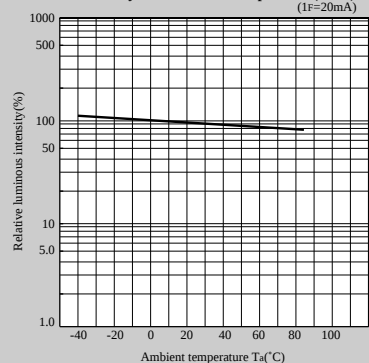
Forward Current Derating Curve



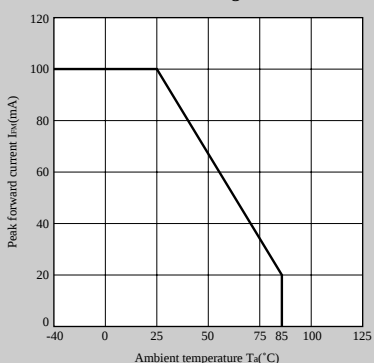
Forward Current vs. Forward Voltage(Note)



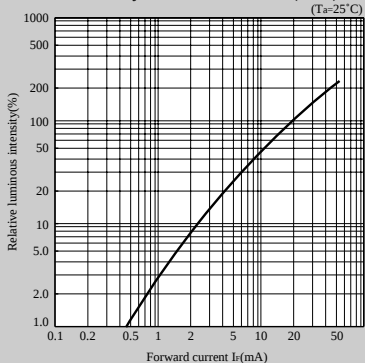
Luminous Intensity vs. Ambient Temperature(Note)



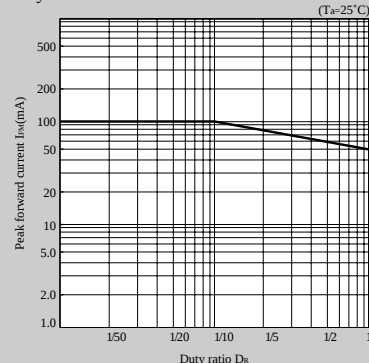
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



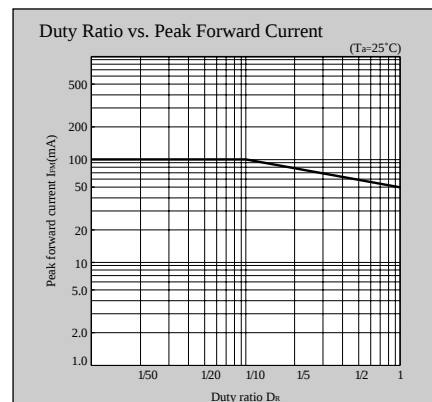
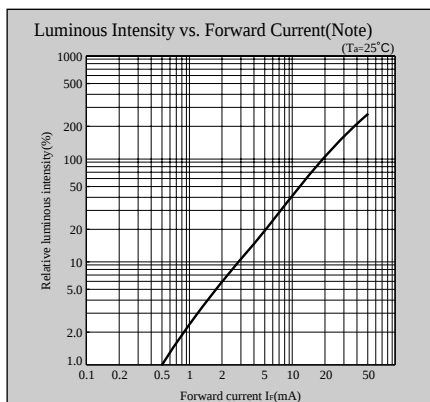
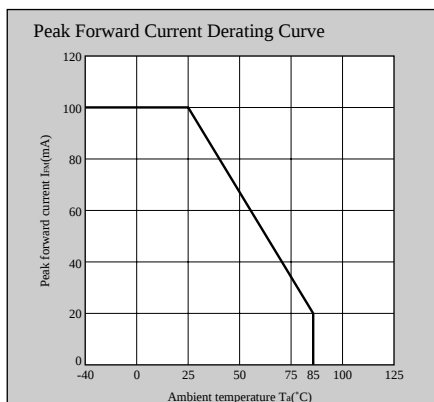
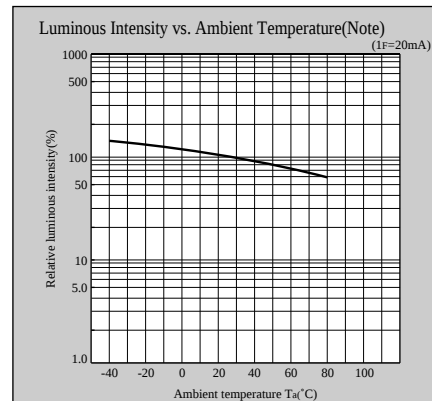
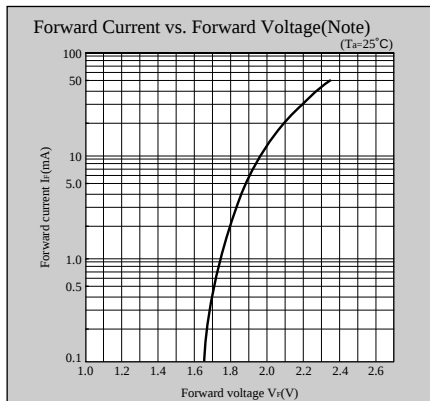
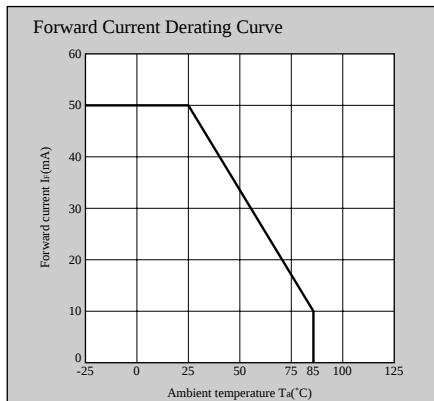
Duty Ratio vs. Peak Forward Current



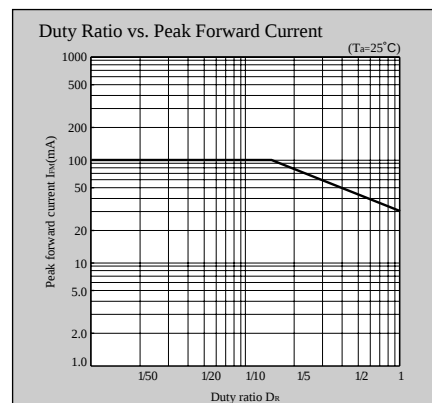
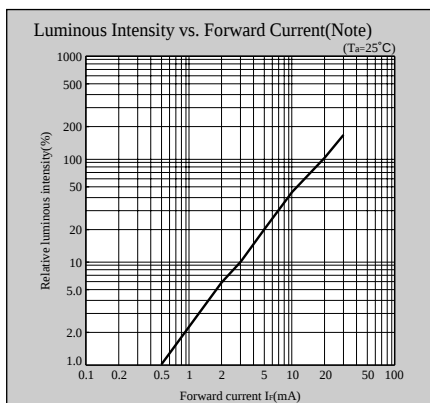
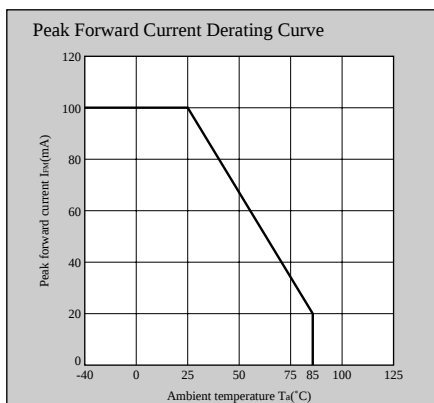
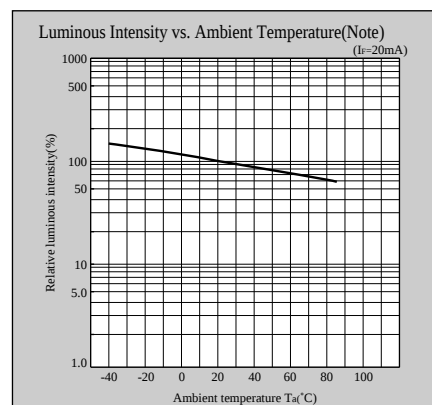
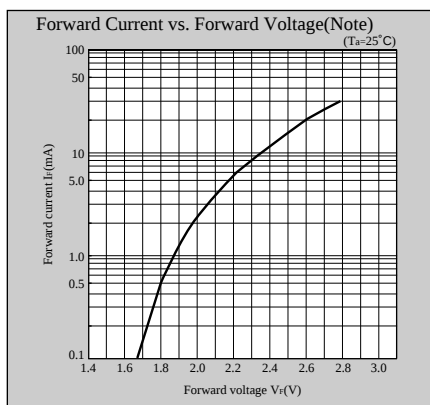
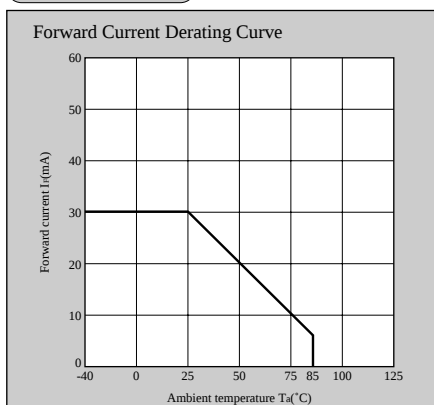
Note) Characteristics shown in diagrams are typical values. (not assurance value)

# Characteristics Diagrams

## ZS series



## GL5XS022BOS

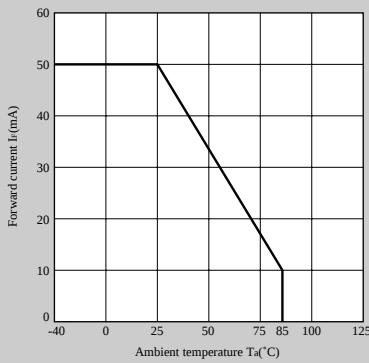


Note) Characteristics shown in diagrams are typical values. (not assurance value)

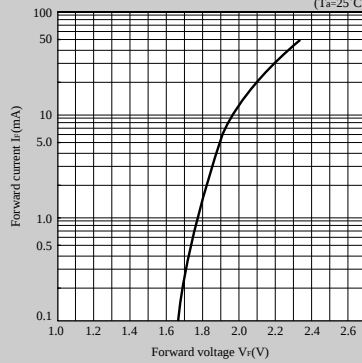
# Characteristics Diagrams

## ZV series

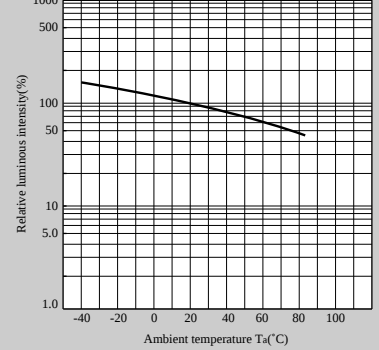
Forward Current Derating Curve



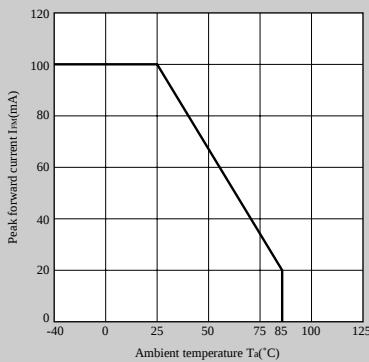
Forward Current vs. Forward Voltage(Note)



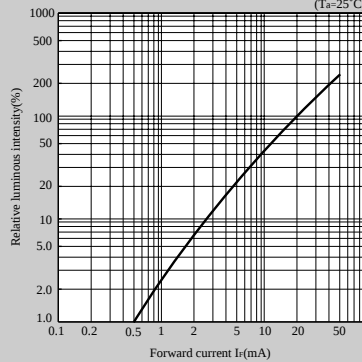
Luminous Intensity vs. Ambient Temperature(Note)



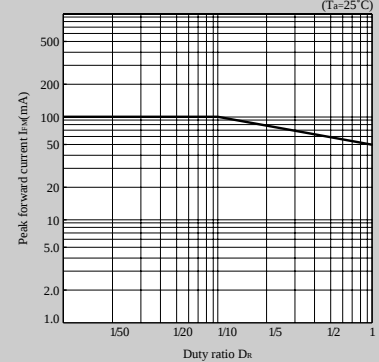
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

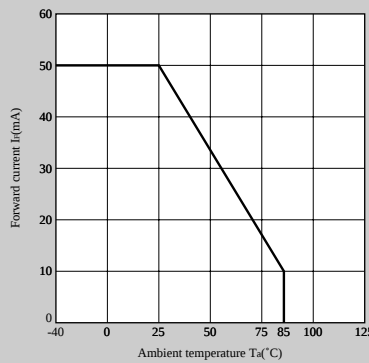


Duty Ratio vs. Peak Forward Current

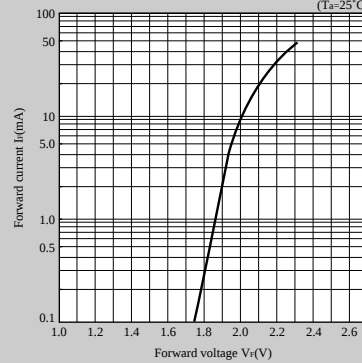


## ZE series

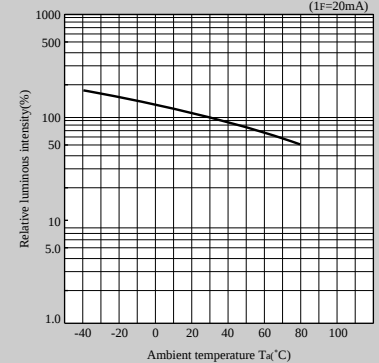
Forward Current Derating Curve



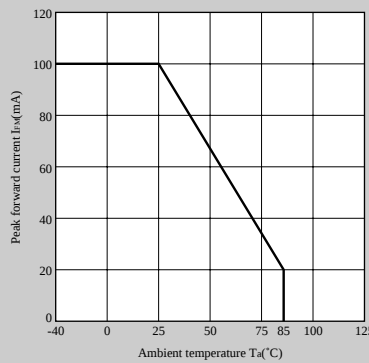
Forward Current vs. Forward Voltage(Note)



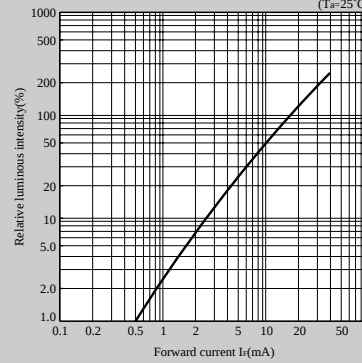
Luminous Intensity vs. Ambient Temperature(Note)



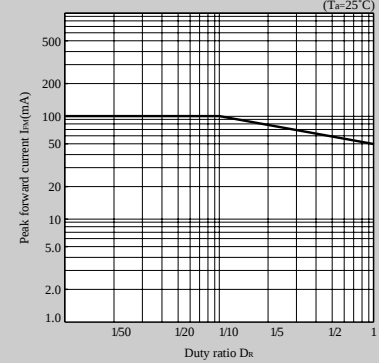
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current

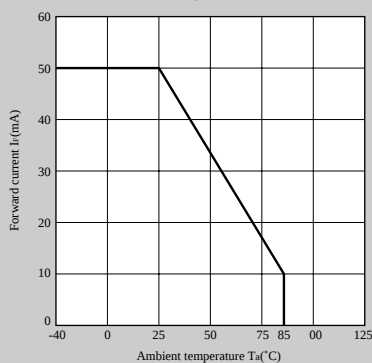


Note) Characteristics shown in diagrams are typical values. (not assurance value)

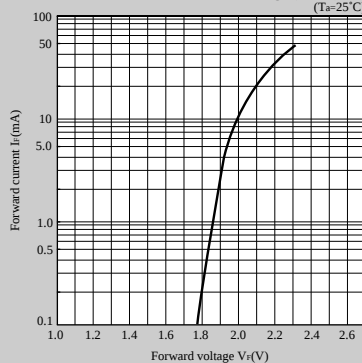
# Characteristics Diagrams

## ZG series

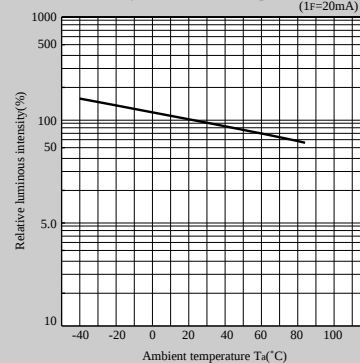
Forward Current Derating Curve



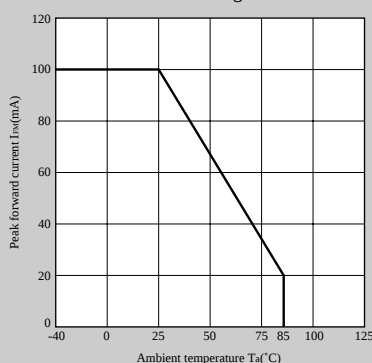
Forward Current vs. Forward Voltage(Note)



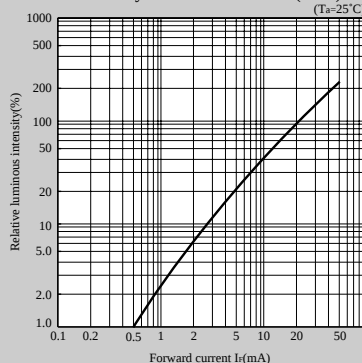
Luminous Intensity vs. Ambient Temperature(Note)



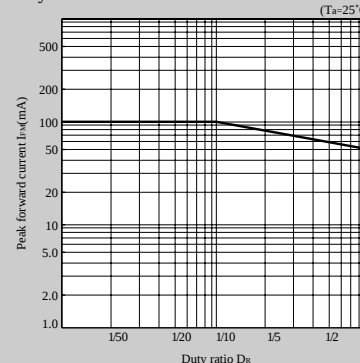
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

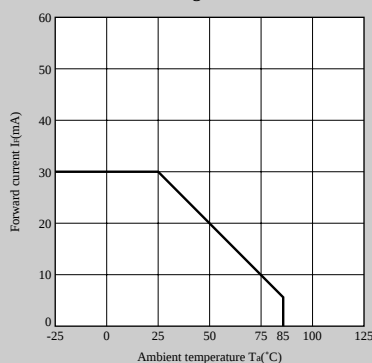


Duty Ratio vs. Peak Forward Current

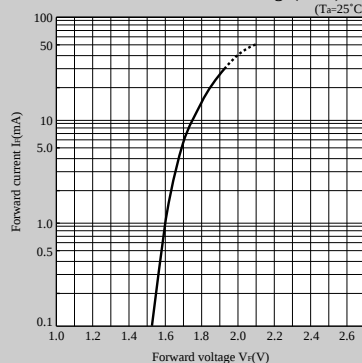


## UR,U series

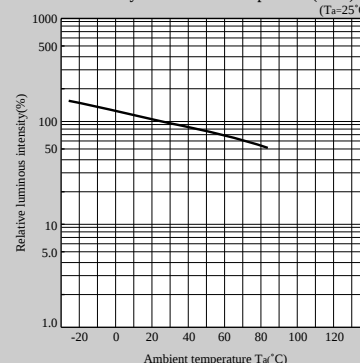
Forward Current Derating Curve



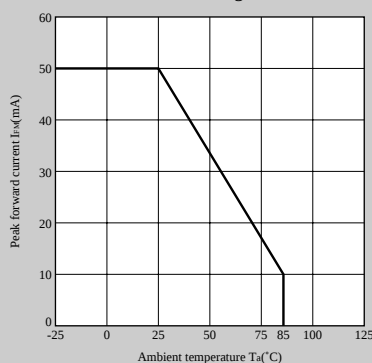
Forward Current vs. Forward Voltage(Note)



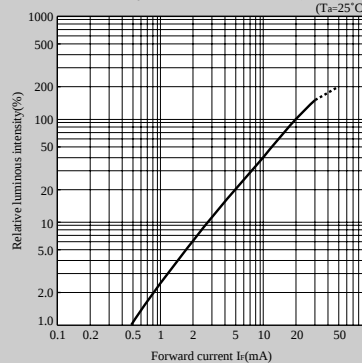
Luminous Intensity vs. Ambient Temperature(Note)



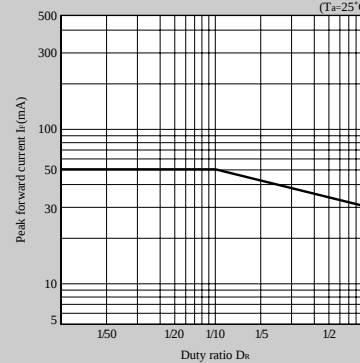
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



Note) Characteristics shown in diagrams are typical values. (not assurance value)

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