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LED365-06Z

- Ultraviolet Light Emitting Diode
- 365 nm, 5.5 mW
- AlGaIn structure
- UV-resistant clear silicone resin
- Integrated Zener Diode



Description

LED365-06Z is an **AlGaIn** based UV LED, typically emitting at 365nm with a typical output power of 5.5 mW. It comes in a hermetically sealed UV-resistant clear 5 mm silicone resin, and features an **integrated Zener diode** for reverse current protection. **LED365-06Z** is widely used for UV curing, and imaging of dyes, inks and markers.

Maximum Rating ($T_{CASE} = 25^{\circ}C$)

| Parameter | Symbol | Values | | Unit |
|--------------------------------|------------|--------|-------|-------------|
| | | Min. | Max. | |
| Power Dissipation, DC | P_D | | 200 | mW |
| Forward Current | I_F | | 50 | mA |
| Pulse Forward Current* | I_{FP} | | 100 | mA |
| Reverse Voltage | V_R | | / | V |
| Thermal Resistance | R_{thja} | | 330 | K/W |
| Junction Temperature | T_J | | 120 | $^{\circ}C$ |
| Operating Temperature | T_{OPR} | - 40 | + 100 | $^{\circ}C$ |
| Storage Temperature | T_{STG} | - 40 | + 100 | $^{\circ}C$ |
| Soldering Temperature (max 5s) | T_{SOL} | | + 250 | $^{\circ}C$ |

* Duty cycle = 1%, pulse width = 10 μ s



Electro-Optical Characteristics ($T_{CASE} = 25^{\circ}C$, $I_F = 20$ mA)

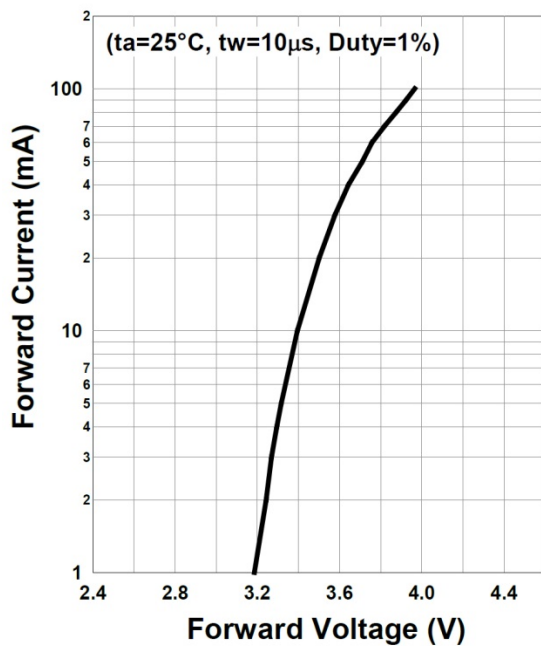
| Parameter | Symbol | Values | | | Unit |
|-----------------------|-----------------|--------|---------|------|------|
| | | Min. | Typ. | Max. | |
| Peak Wavelength**1 | λ_P | 360 | 365 | 370 | nm |
| Spectral Width (FWHM) | $\Delta\lambda$ | | 17 | | nm |
| Forward Voltage | V_F | | 3.5 | 4.0 | V |
| | V_F PULSE | | 4* | | V |
| Radiated Power | P_O | | 5.5 | | mW |
| | P_O PULSE | | 30* | | mW |
| Viewing Half Angle | $\Theta_{1/2}$ | | ± 2 | | deg. |
| Rise/Fall Time | t_t | | 50/55 | | ns |

*Pulse Condition: Duty cycle = 1%, pulse width = 10 μ s, pulse current = 100mA

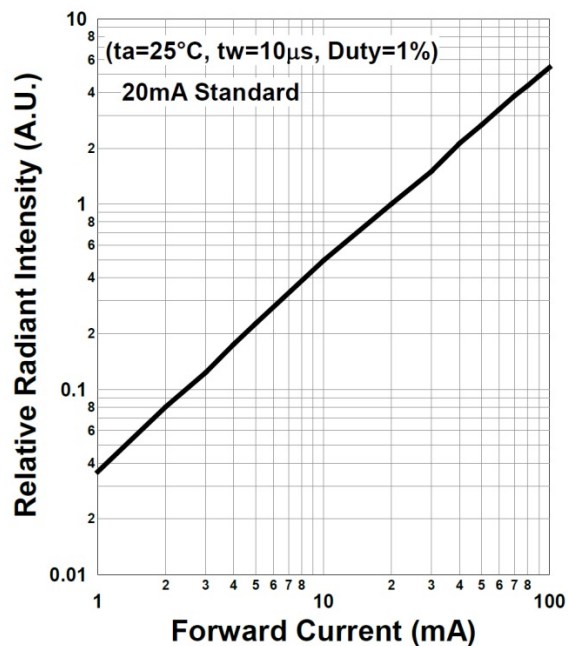


Performance Characteristics

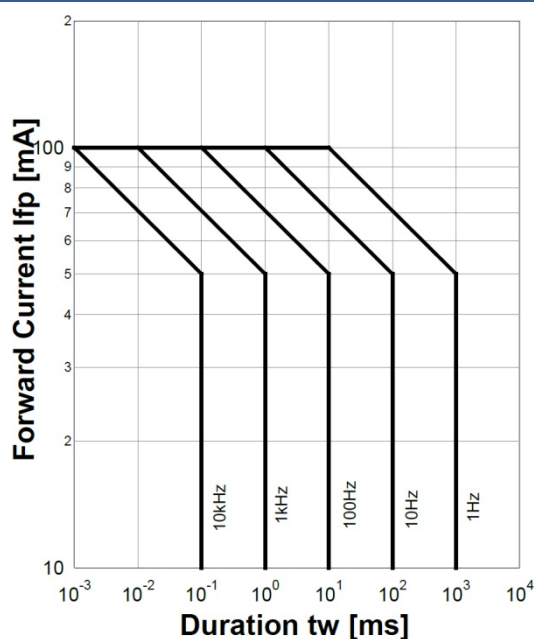
Forward Current vs. Forward Voltage



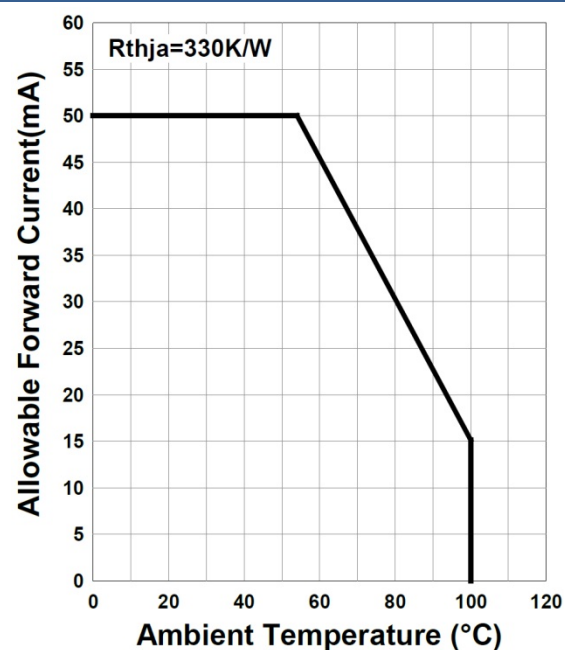
Relative Radiant Intensity vs. Forward Current



Forward Current vs. Pulse Duration



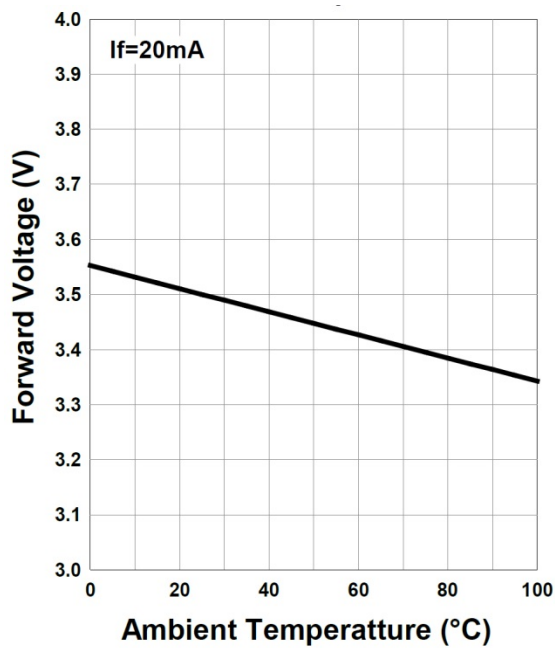
Allowable Forward Current vs. Ambient Temp.



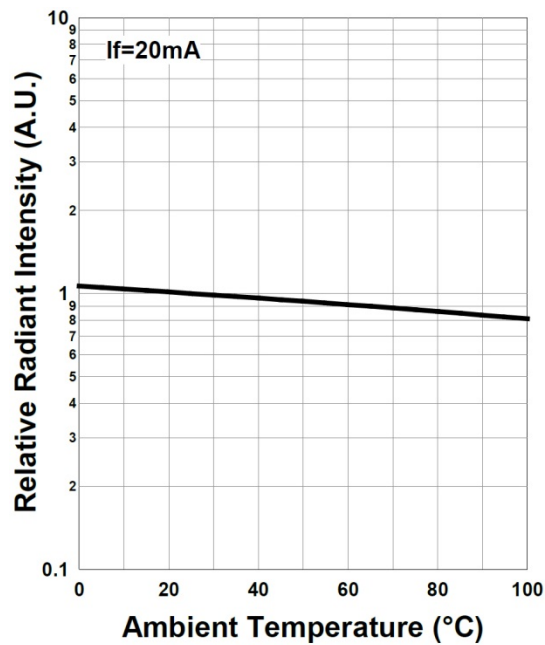


Performance Characteristics

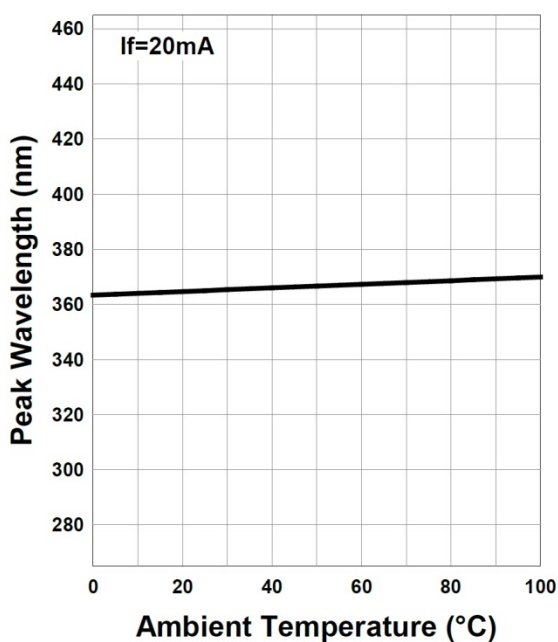
Forward Voltage vs. Ambient Temperature



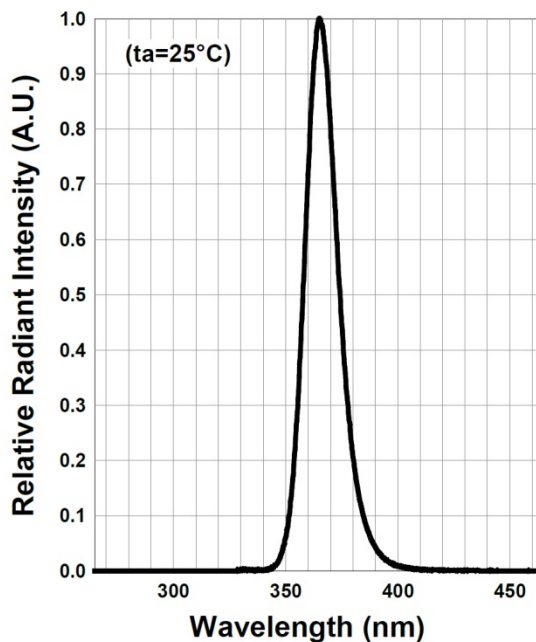
Relative Radiant Intensity vs. Ambient Temp.



Peak Wavelength vs. Ambient Temperature



Relative Spectral Emission





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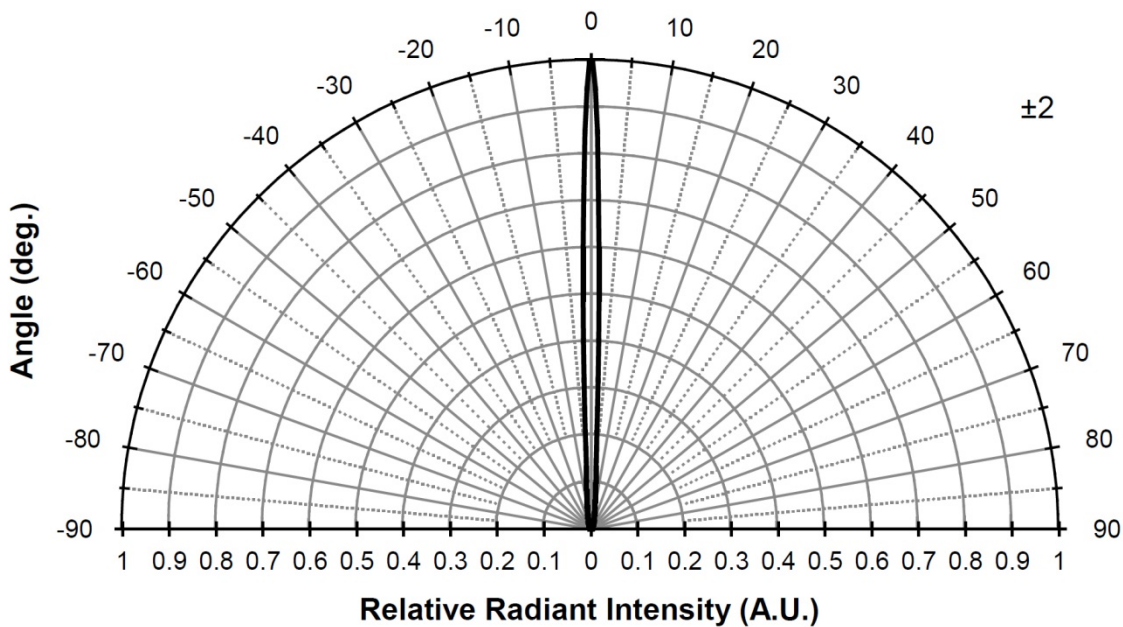
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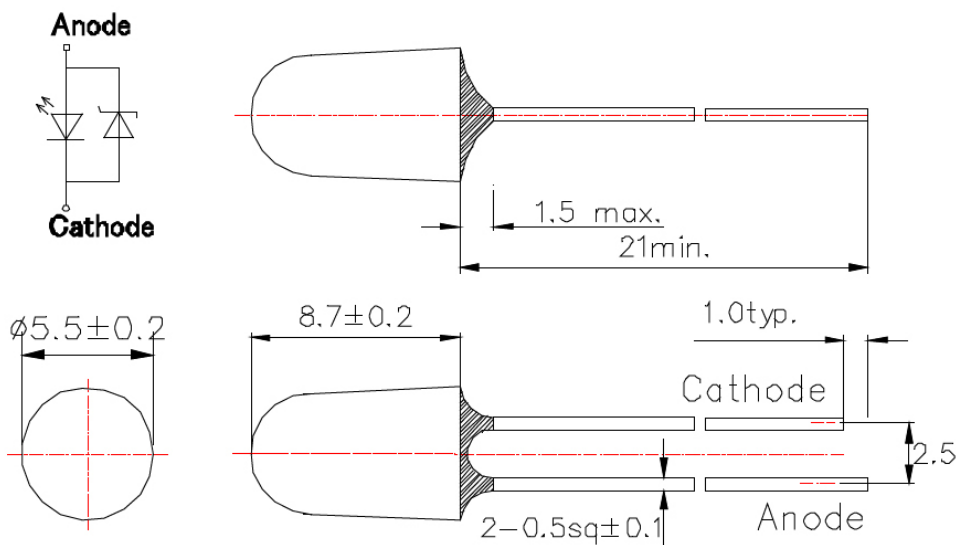


Performance Characteristics

Radiation Characteristics



Outline Dimensions



All dimensions in mm

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The above specifications are for reference purpose only and subjected to change without prior notice