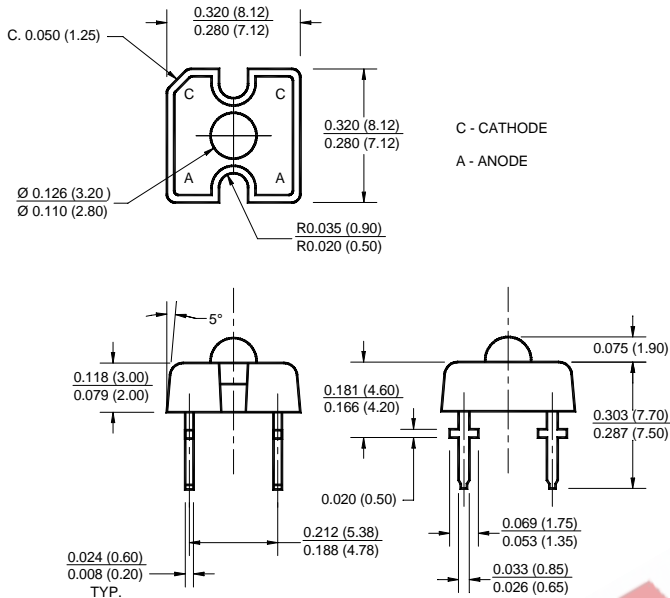


PACKAGE DIMENSIONS



NOTES:

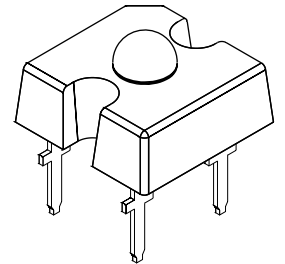
1. Dimensions for all drawings are in inches (mm).
2. Lead spacing is measured where the leads emerge from the package.
3. Protruded resin under the flange is 0.059" (1.5 mm) max.
4. All tolerances are ± 0.10 " (0.25 mm) unless otherwise specified.

WHITE

QTLP321C-W

FEATURES

- InGaN (Indium Gallium Nitride) technology
- Fluorescent light emission
- Reduced thermal resistance
- Tube packaging



DESCRIPTION

This low profile, 4-pin LED provides a more uniform and evenly distributed illumination than existing LED designs. Its unique optical package enables designers to utilize fewer LEDs while achieving superior lighting performance.

APPLICATIONS

- Exterior automotive lighting
- Area displays
- Backlighting
- Message panels

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Rating | Unit |
|---|-----------|---------------|------------------|
| Operating Temperature | T_{OPR} | -25 to +80 | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -30 to +100 | $^\circ\text{C}$ |
| Lead Soldering Time | T_{SOL} | 260 for 5 sec | $^\circ\text{C}$ |
| Continuous Forward Current | I_F | 20 | mA |
| Peak Forward Current ($f = 100$ Hz, Duty Factor = 1/10) | I_F | 100 | mA |
| Reverse Voltage | V_R | 5 | V |
| Power Dissipation | P_D | 120 | mW |

WHITE

QTLP321C-W

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

| Part Number | QTLP321C-W | Condition |
|-------------------------------------|--------------------|------------------------|
| Flux - Φ _V (mlm) | | I _F = 20 mA |
| Minimum | 250 | |
| Typical | 500 | |
| Chromatic Coordinates - Typical | X = 0.32, Y = 0.32 | I _F = 20 mA |
| Peak Wavelength (nm) | 550 | I _F = 20 mA |
| Forward Voltage V _F (V): | | I _F = 20 mA |
| Typical | 3.5 | |
| Maximum | 4.0 | |
| Viewing Angle (°) | 50 | I _F = 20 mA |

TYPICAL PERFORMANCE CURVES

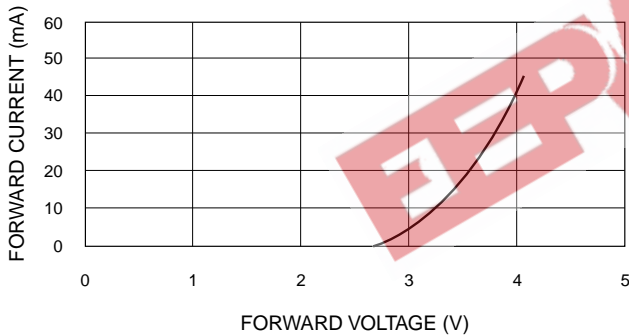


Fig. 1 Forward Voltage vs. Forward Current

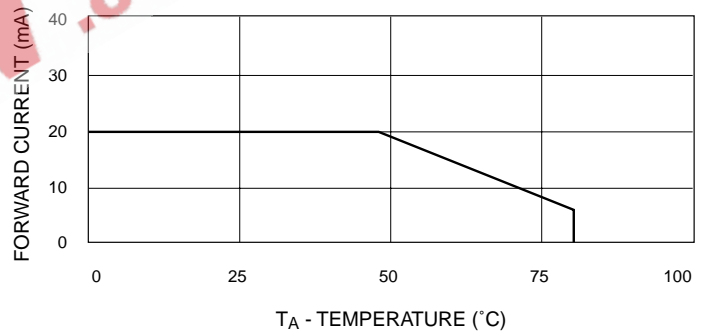


Fig. 2 Forward Current vs. Ambient Temperature

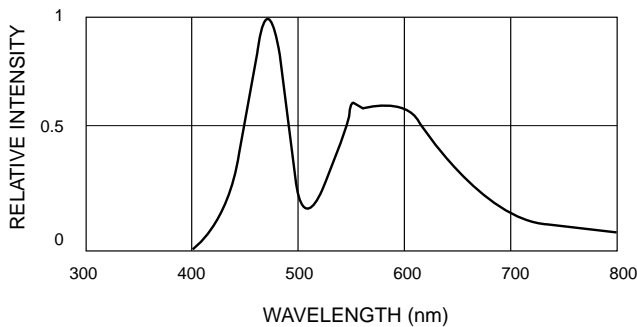


Fig. 3 Relative Intensity vs. Wavelength

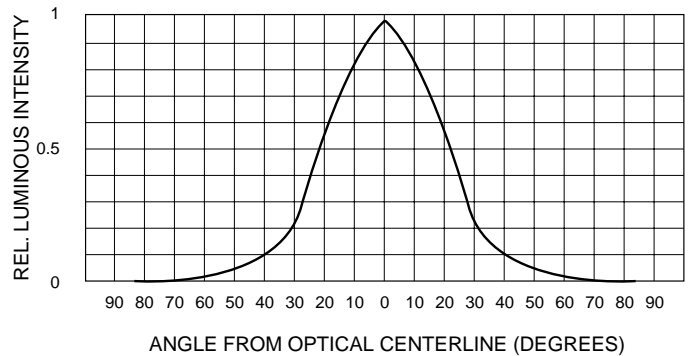


Fig. 4 Rel. Luminous Intensity vs. Angular Displacement

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