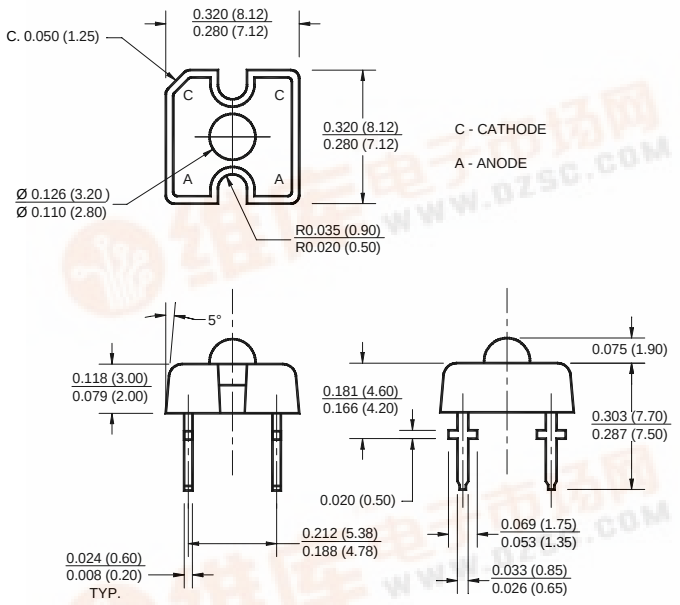
FAIRCHILD
SEMICONDUCTOR™

4 - PIN POWER LED

PACKAGE DIMENSIONS



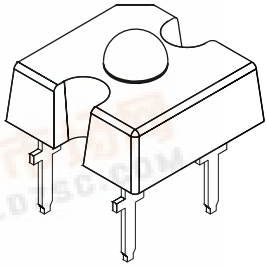
NOTES:

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°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T_{OPR}	-25 to +80	°C
Storage Temperature	T_{STG}	-30 to +100	°C
Lead Soldering Time	T_{SOL}	260 for 5 sec	°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

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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

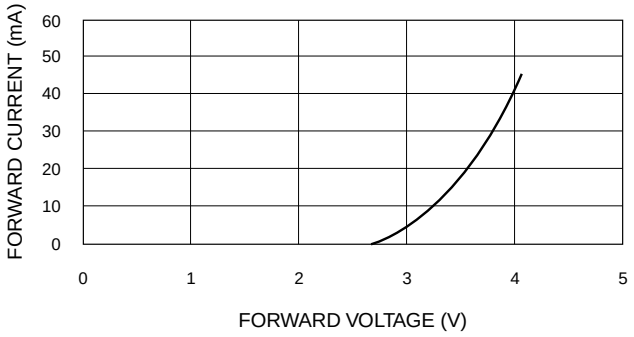

Fig. 1 Forward Voltage vs. Forward Current

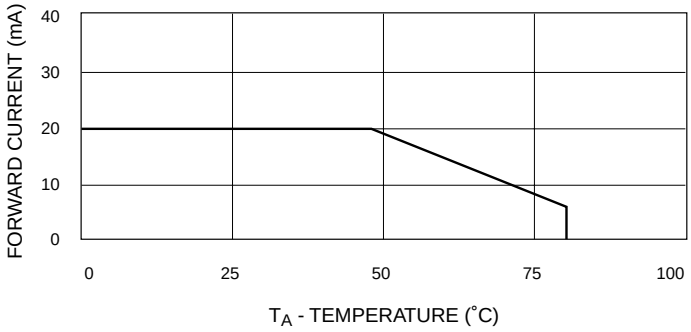

Fig. 2 Forward Current vs. Ambient Temperature

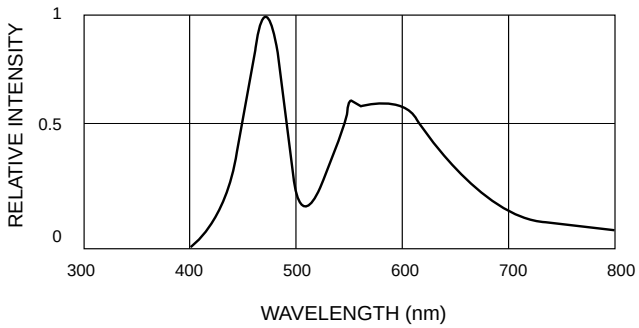

Fig. 3 Relative Intensity vs. Wavelength

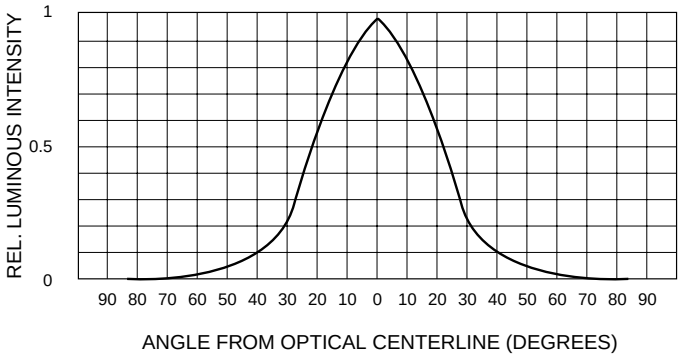

Fig. 4 Rel. Luminous Intensity vs. Angular Displacement

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.