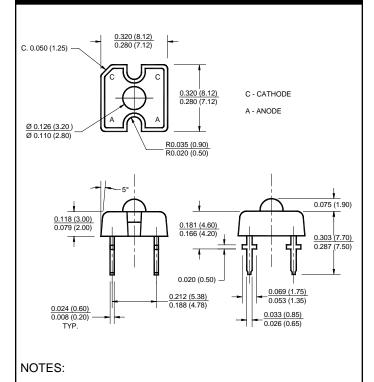


4 - PIN POWER LED

PACKAGE DIMENSIONS



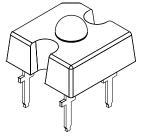
- 1. Dimensions for all drawings are in inches (mm).
- 2. Lead spacing is measured where the leads emerge from the package.
- 3. Protruded resin under the flange is 0.059" (1.5 mm) max.
- 4. All tolerances are ±0.10" (0.25 mm) unless otherwise
- specified.

RED ORANGE YELLOW

QTLP321C-R QTLP321C-E QTLP321C-Y

FEATURES

- AllnGaP (Aluminum Indium Gallium Phosphide) technology
- High current application
- 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}	-40 to +100	°C		
Storage Temperature	T _{STG}	-40 to +100	°C		
Lead Soldering Time	T _{SOL}	260 for 5 sec	°C		
Continuous Forward Current	I _F	70	mA		
Peak Forward Current	1	200	mA		
(f = 100 Hz, Duty Factor = 1/10)	IF	200			
Reverse Voltage	V _R	5	V		
Power Dissipation	P _D	160	mW		



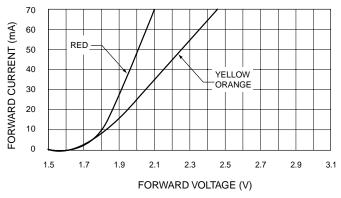
4 - PIN POWER LED

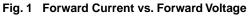
RED ORANGE YELLOW

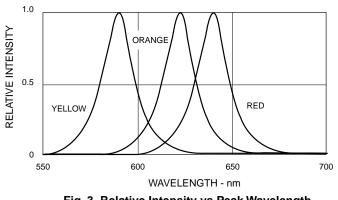
QTLP321C-R QTLP321C-E QTLP321C-Y

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)					
Part Number	QTLP321C-R	QTLP321C-E	QTLP321C-Y	Condition	
Luminous Flux (mlm)				I _F = 70 mA	
Minimum	500	500	500		
Typical	1300	1300	1300		
Forward Voltage V _F (V)				l _F = 20 / 70 mA	
Maximum	2.4 / 2.8	2.4 / 2.8	2.4 / 2.8		
Typical	2.0 / 2.2	2.0 / 2.2	2.0 / 2.2		
Wavelength (nm)				I _F = 70 mA	
Peak	640	620	590		
Dominant	630	615	589		
Spectral Line Half Width (nm)	20	18	15	I _F = 70 mA	
Viewing Angle (°)	50	50	50	I _F = 70 mA	

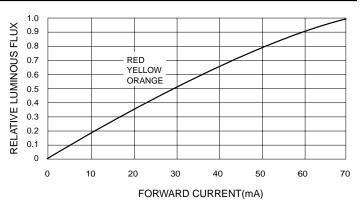
TYPICAL PERFORMANCE CURVES



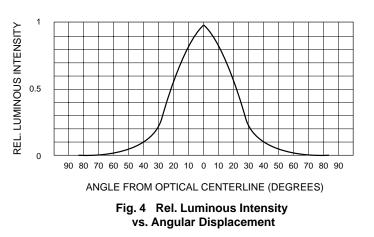














4 - PIN POWER LED

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

- Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
- 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.

www.fairchildsemi.com

© 2000 Fairchild Semiconductor Corporation