Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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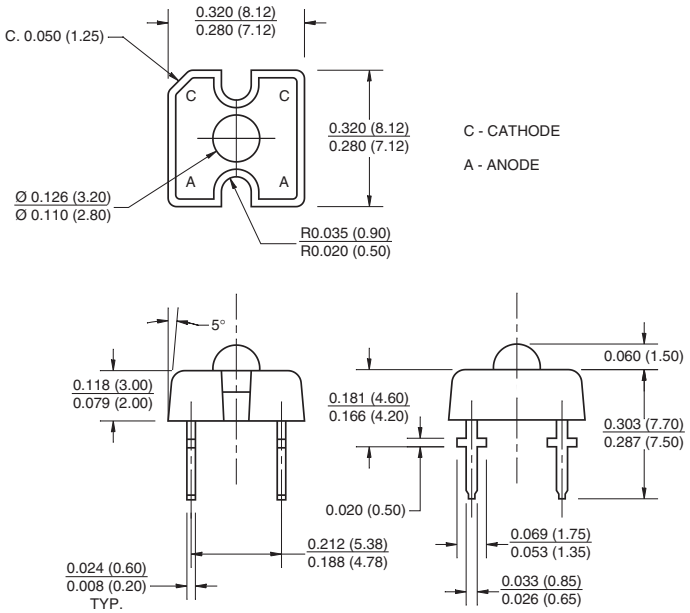
FAIRCHILD
SEMICONDUCTOR®

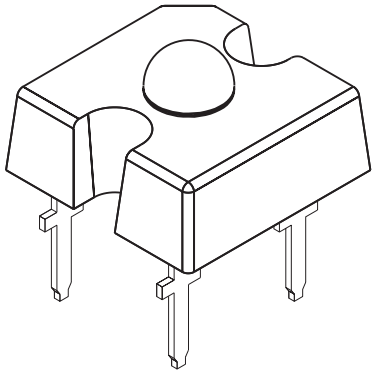
4 - PIN POWER LED

RED QTLP320C-R ORANGE QTLP320C-E YELLOW QTLP320C-Y

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.



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.

FEATURES

- AlInGaP (Aluminum Indium Gallium Phosphide) technology
- High current application
- Reduced thermal resistance
- Tube packaging

APPLICATIONS

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

4 - PIN POWER LED

RED QTLP320C-R ORANGE QTLP320C-E YELLOW QTLP320C-Y

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 (f = 100 Hz, Duty Factor = 1/10)	I_F	200	mA
Reverse Voltage	V_R	5	V
Reverse Current	I_R	10	µA
Power Dissipation	P_D	160	mW

ELECTRICAL/OPTICAL CHARACTERISTICS (T_A =25°C)				
Part Number	**QTLP320C-R**	**QTLP320C-E**	**QTLP320C-Y**	**Condition**
Luminous Flux (mlm)				I_F = 70 mA
Minimum	500	500	500	
Typical	1300	1300	1300	
Forward Voltage VF (V)				I_F = 70 mA
Maximum	2.9	2.9	2.9	
Typical	2.3	2.3	2.3	
Wavelength (nm)				I_F = 70 mA
Peak	630	620	590	
Dominant	625	615	589	
Spectral Line Half Width (nm)	20	18	15	I_F = 70 mA
Viewing Angle (°)	70	70	70	I_F = 70 mA

RED QTLP320C-R ORANGE QTLP320C-E YELLOW QTLP320C-Y

TYPICAL PERFORMANCE CURVES

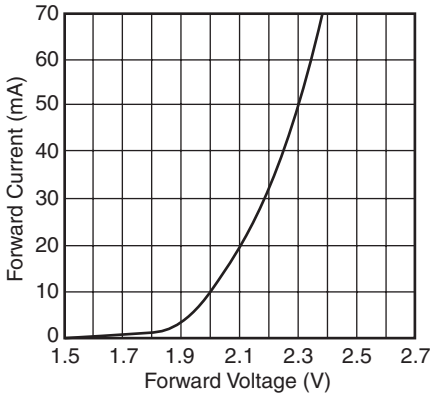


Fig 1. Forward Current vs. Forward Voltage

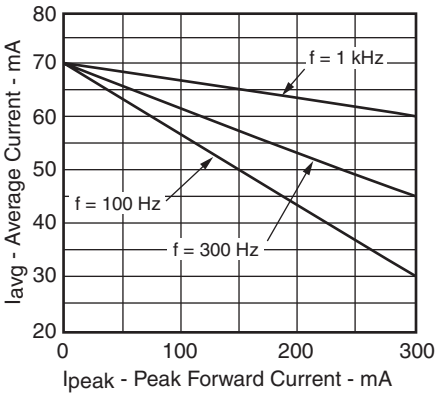


Fig 2. Maximum Average Current vs. Peak Forward Current

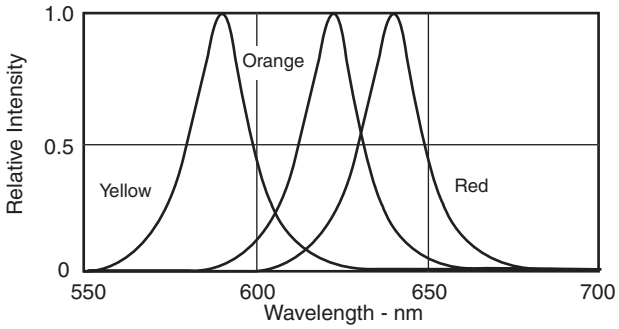


Fig. 3 Relative Intensity vs Peak Wavelength

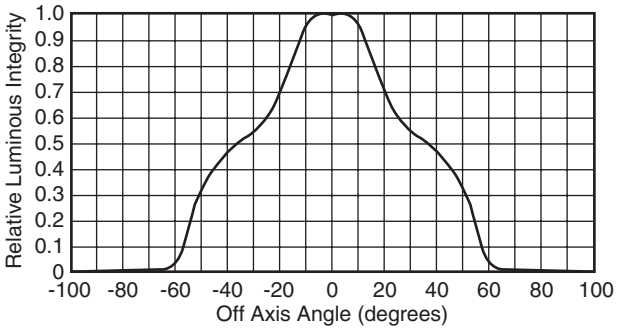


Fig 4. Relative Luminous Intensity vs. Off Axis Angle

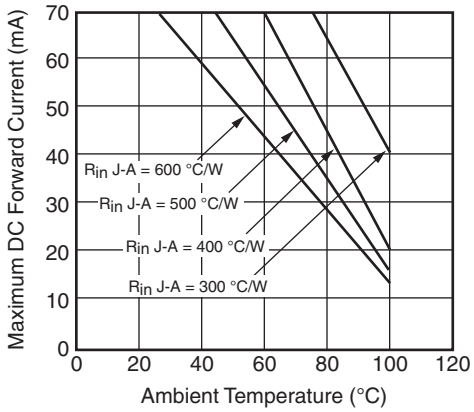


Fig 5. Maximum DC Forward Current vs. Ambient Temperature

RED QTLP320C-R ORANGE QTLP320C-E YELLOW QTLP320C-Y

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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.