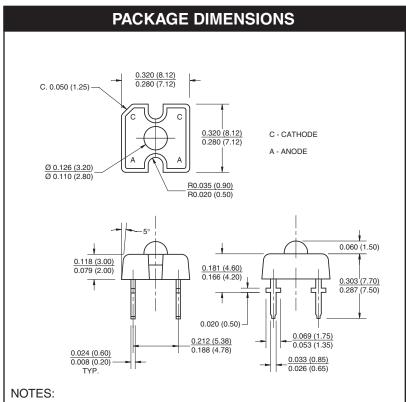
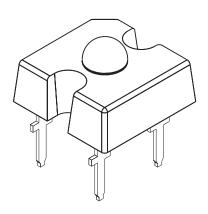
RED QTLP320C-R ORANGE QTLP320C-E YELLOW QTLP320C-Y





- 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

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

APPLICATIONS

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



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	l _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	μΑ			
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)				$I_F = 70 \text{ mA}$		
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		

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TYPICAL PERFORMANCE CURVES

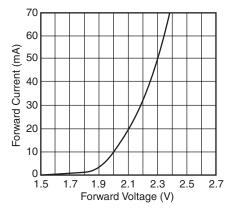


Fig 1. Forward Current vs. Forward Voltage

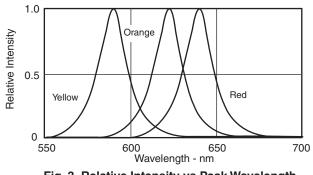


Fig. 3 Relative Intensity vs Peak Wavelength

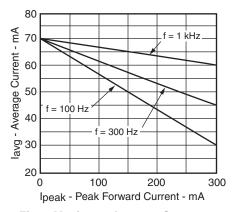


Fig 2. Maximum Average Current vs.

Peak Forward Current

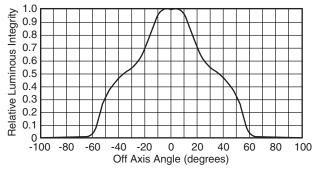


Fig 4. Relative Luminous Intensity vs. Off Axis Angle

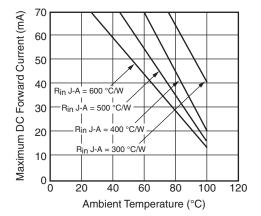


Fig 5. Maximum DC Forward Current vs. Ambient Temperature



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- 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.