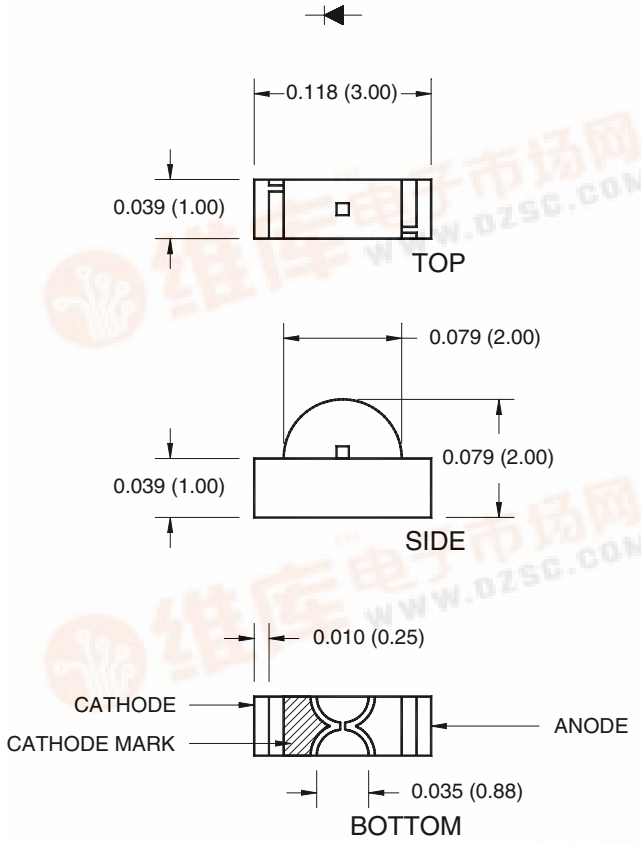
FAIRCHILD
SEMICONDUCTOR™

SURFACE MOUNT LED LAMP
Right Angle - (Side Looker)

PURE GREEN	QTLP610C-5
SOFT ORANGE	QTLP610C-8

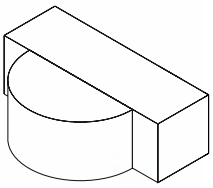
PACKAGE DIMENSIONS



NOTE:
Dimensions are in inches (mm).

FEATURES

- Ultra-miniature
- Wide viewing angle of 140°
- Water clear optics
- Available in 0.315” (8mm) width tape on 7” (178mm) diameter
- Moisture-proof packaging



DESCRIPTION

These right angle surface mount lamps emit light in the lateral direction and are particularly suitable for edge lighting LCDs, edge-cards, as well as other standard printed circuit board applications.

ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

Parameter	Pure Green QTLP610C-5	Soft Orange QTLP610C-8	Units
Continuous Forward Current - I_F	30	30	mA
Peak Forward Current - I_F (f = 1.0 KHz, Duty Factor = 1/10)	160	160	mA
Reverse Voltage - V_R (I_R = 10 µA)	5	5	V
Power Dissipation - P_D	100	100	mW
Operating Temperature - T_{OPR}	-40 to +100		°C
Storage Temperature - T_{STG}	-40 to +100		°C
Lead Soldering Time - T_{SOL}			
Wave	260 for 5 sec		°C
Reflow	260 for 10 sec		

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ELECTRICAL / OPTICAL CHARACTERISTICS (T_A =25°C)

Part Number	Pure Green QTLP610C-5	Soft Orange QTLP610C-8	Condition
Luminous Intensity (mcd)			I_F = 20 mA
Minimum	2.0	3.0	
Typical	4.0	6.0	
Forward Voltage (V)			I_F = 20 mA
Maximum	2.8	2.8	
Typical	2.1	2.1	
Peak Wavelength (nm)	555	610	I_F = 20 mA
Spectral Line Half Width (nm)	30	40	I_F = 20 mA
Viewing Angle (°)	140	140	I_F = 20 mA

TYPICAL PERFORMANCE CURVES

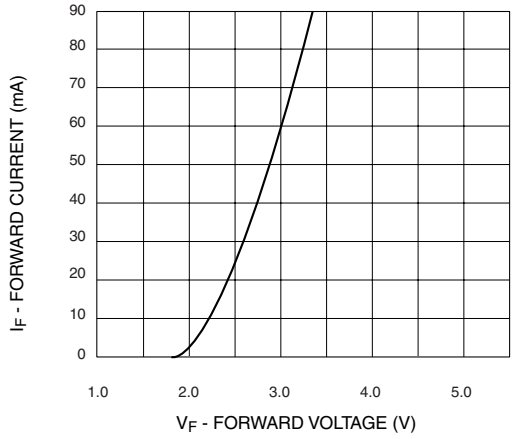

Fig. 1 Forward Current vs. Forward Voltage

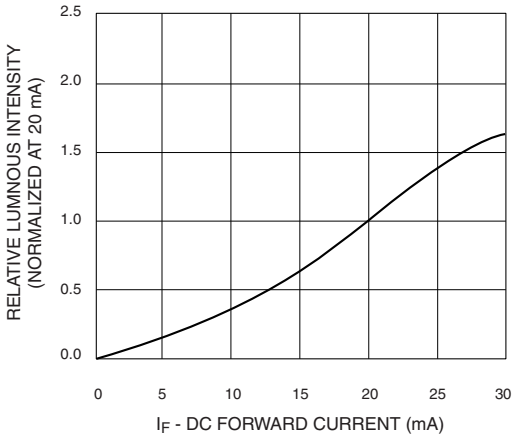

Fig. 2 Relative Luminous Intensity vs. DC Forward Current

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TYPICAL PERFORMANCE CURVES

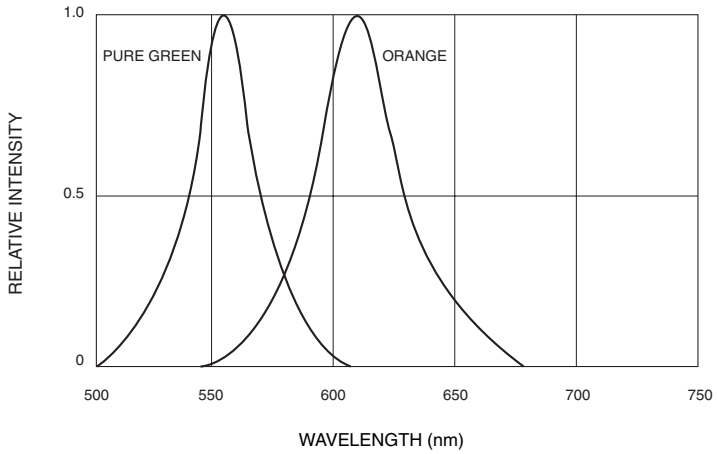

Fig. 3 Relative Intensity vs. Peak Wavelength

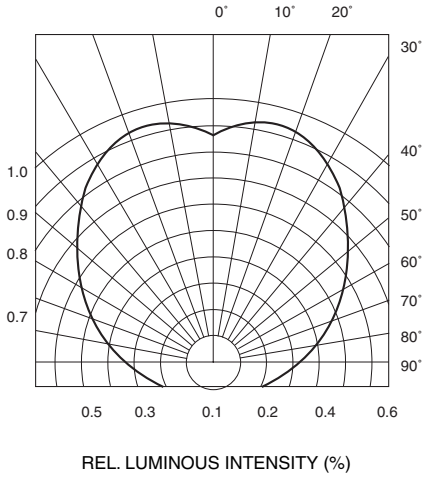

Fig. 4 Radiation Diagram

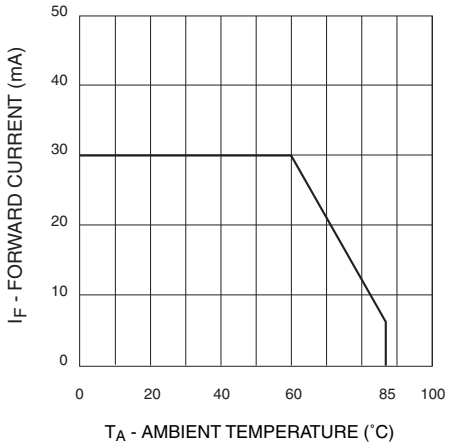

Fig. 5 Current Derating Curve

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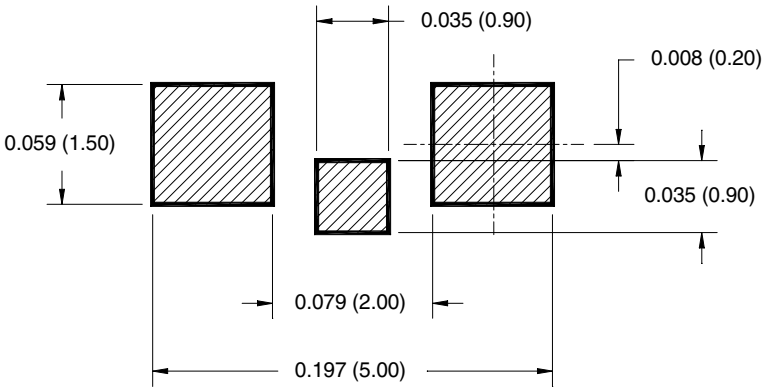
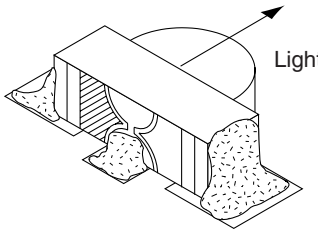
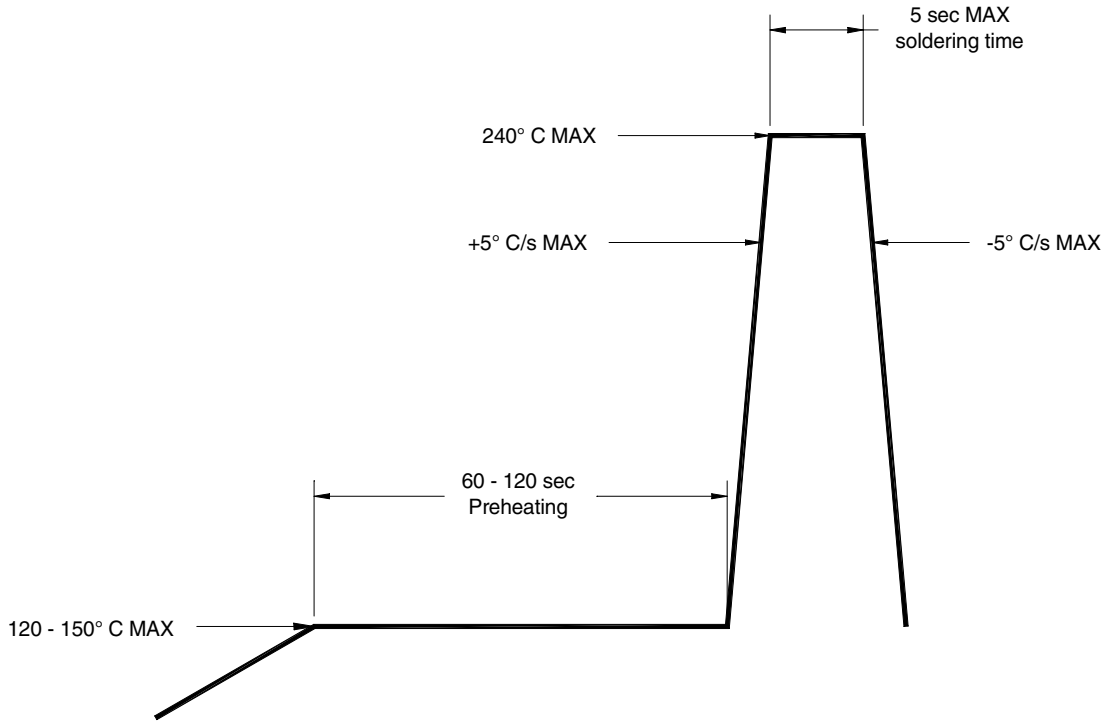
RECOMMENDED PRINTED CIRCUIT BOARD PATTERN





Mounting Example

RECOMMENDED IR REFLOW SOLDERING PROFILE



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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.