



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

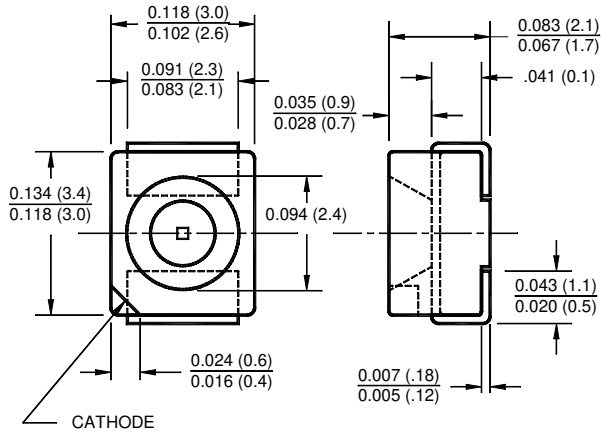
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SURFACE MOUNT LED LAMP

PLCC - 2 PACKAGE

PACKAGE DIMENSIONS



NOTE:

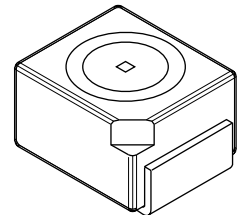
Dimensions for all drawings are in inches (mm).

ORANGE
PURE GREEN

QTLP670C-8
QTLP670C-5

FEATURES

- Non-diffused package excellent for back-lighting and coupling to light pipe
- Low package profile
- Low power dissipation
- Wide viewing angle of 120°



DESCRIPTION

This surface mount lamp is designed with a flat top and sides for automatic placement equipment. It is compatible with convective IR and vapor phase reflow soldering and conductive epoxy attachment process. The package size and configuration conform to EIA-535 BAAC standard specification for case size 3528 tantalum capacitor.

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

Parameter	Symbol	Rating	Unit
Operating Temperature	T _{OPR}	-40 to +85	°C
Storage Temperature	T _{STG}	-40 to +100	°C
Lead Soldering Time - Reflow	T _{SOL}	240 for 5 sec	°C
Continuous Forward Current	I _F	30	mA
Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10)	I _F	160	mA
Reverse Voltage	V _R (I _R = 10 μA)	5	V
Power Dissipation	P _D	100	mW

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

Part Number	QTLP670C-8 ORANGE	QTLP670C-5 PURE GREEN	Condition
Luminous Intensity (mcd)			I _F = 20 mA
Minimum	9	4	
Typical	15	6	
Forward Voltage (V)			I _F = 20 mA
Maximum	2.8	2.8	
Typical	2.0	2.0	
Peak Wavelength (nm)	610	555	I _F = 20 mA
Spectral Line Half Width (nm)	40	30	I _F = 20 mA
Viewing Angle (°)	120	120	I _F = 20 mA

ORANGE
PURE GREEN

QTLP670C-8
QTLP670C-5

TYPICAL PERFORMANCE CURVES

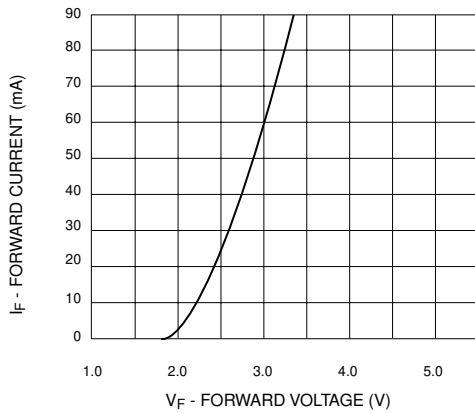


Fig. 1 Forward Current vs. Forward Voltage

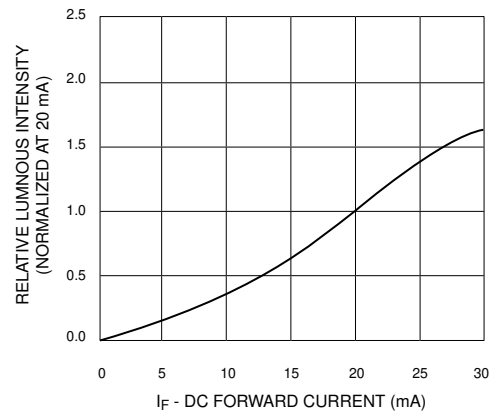


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

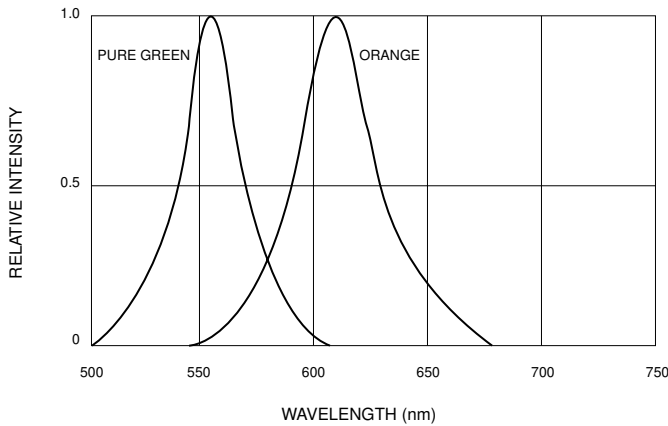


Fig. 3 Relative Intensity vs. Peak Wavelength

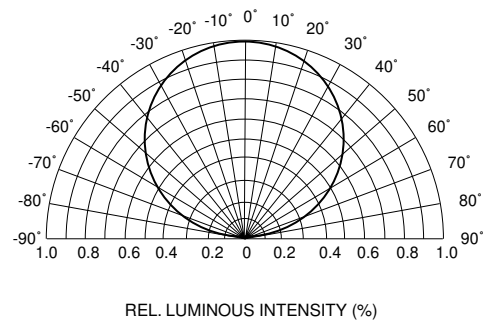


Fig. 4 Radiation Diagram

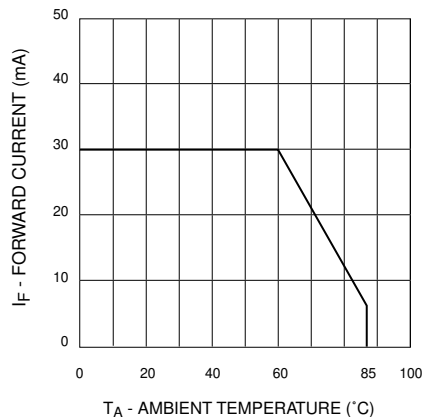
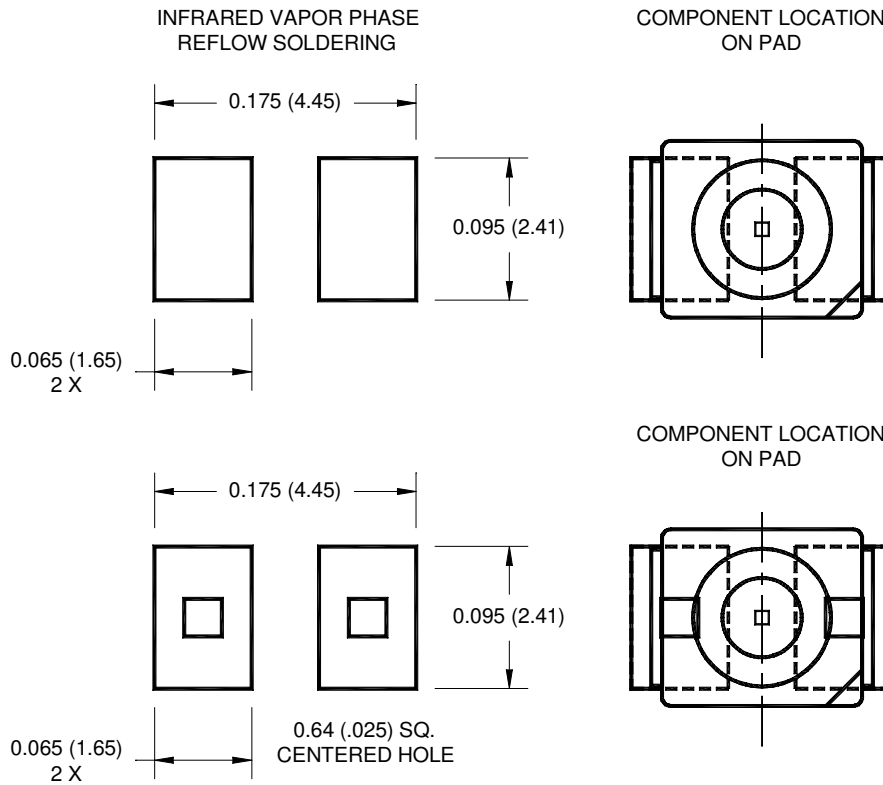


Fig. 5 Current Derating Curve

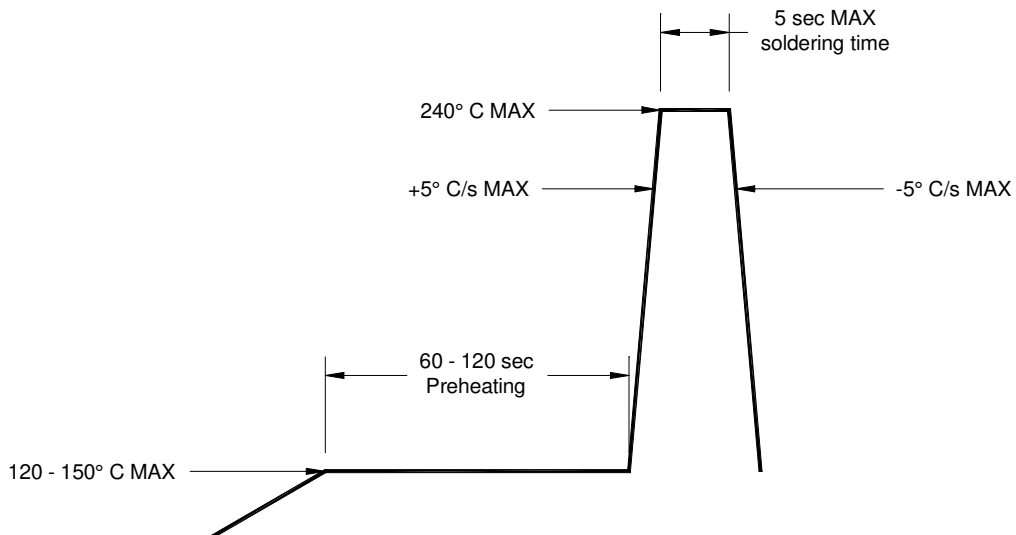
ORANGE
PURE GREEN

QTLP670C-8
QTLP670C-5

RECOMMENDED PRINTED CIRCUIT BOARD PATTERN



RECOMMENDED IR REFLOW SOLDERING PROFILE



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:

1. 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.