

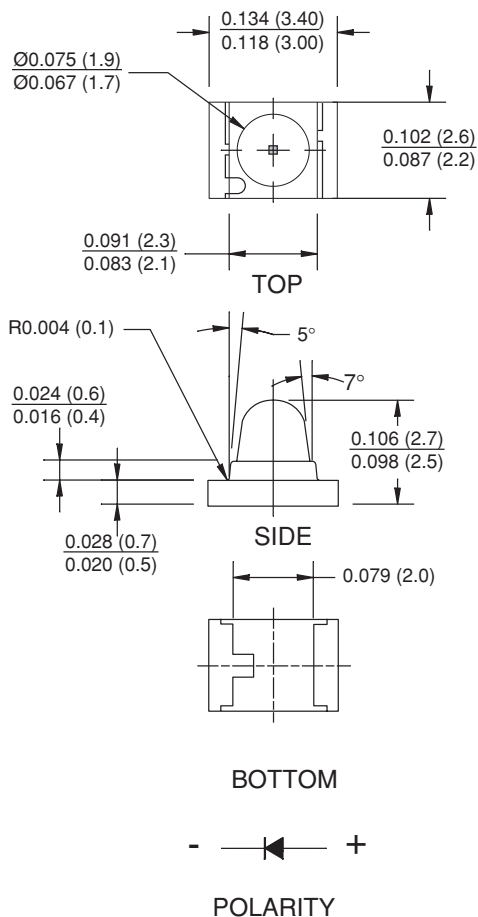
阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets".

PACKAGE DIMENSIONS



NOTE:
Dimensions for all drawings are in inches (mm).

FEATURES

- 1.8mm Dome Lens Package
- Available in 0.315" (8mm) width tape on 7" (178mm) diameter reel; 2,000 units per reel
- Narrow Emission Angle, 30°
- Wavelength = 940 nm, GaAs
- Water Clear Lens
- Matched Photosensor: QTLP660CPDF

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T_{OPR}	-40 to +85	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 to +90	$^\circ\text{C}$
Soldering Temperature (Iron) ^(1,2,3)	T_{SOL-I}	240 for 5 sec	$^\circ\text{C}$
Soldering Temperature (Flow) ^(1,2)	T_{SOL-F}	260 for 10 sec	$^\circ\text{C}$
Continuous Forward Current	I_F	65	mA
Reverse Voltage	V_R	5	V
Power Dissipation ⁽⁴⁾	P_D	130	mW
Peak Forward Current (Pulse width = 100 μs , Duty Cycle=1%)	I_{FD}	1.0	A

Notes:

1. RMA flux is recommended.
2. Methanol or isopropyl alcohols are recommended as cleaning agents.
3. Soldering iron tip at 1/16" (1.6mm) from housing
4. At 25°C or below

ELECTRICAL / OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

PARAMETER	TEST CONDITIONS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Peak Emission Wavelength	$I_F = 20\text{ mA}$	λ_P	—	940	—	nm
Emission Angle	$I_F = 20\text{ mA}$	Θ	—	± 15	—	Deg.
Forward Voltage	$I_F = 20\text{ mA}$	V_F	—	1.2	1.5	V
	$I_F = 100\text{ mA}$, $t_P = 100\text{ }\mu\text{s}$, Duty Cycle = 0.01		—	1.4	1.85	
	$I_F = 1\text{ A}$, $t_P = 100\text{ }\mu\text{s}$, Duty Cycle = 0.01		—	2.6	4.0	
Reverse Current	$V_R = 5\text{ V}$	I_R	—	—	100	μA
Radiant Intensity	$I_F = 20\text{ mA}$	E_e	1.0	3.0	—	mW/sr
	$I_F = 100\text{ mA}$, $t_P = 100\text{ }\mu\text{s}$, Duty Cycle = 0.01		—	14	—	
	$I_F = 1\text{ A}$, $t_P = 100\text{ }\mu\text{s}$, Duty Cycle = 0.01		—	140	—	
Rise Time	$I_F = 100\text{ mA}$,	t_r	—	1	—	μs
Fall Time	$t_P = 20\text{ ms}$	t_f	—	1	—	μs

TYPICAL PERFORMANCE CURVES

Fig. 1 Forward Current vs. Ambient Temperature

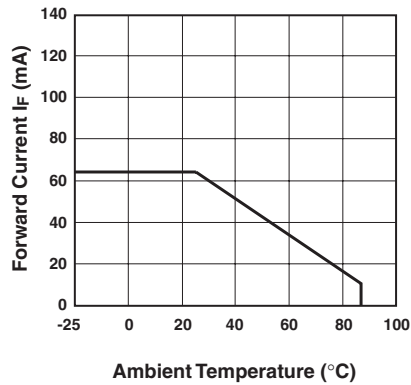


Fig. 2 Relative Radiant Intensity vs. Wavelength

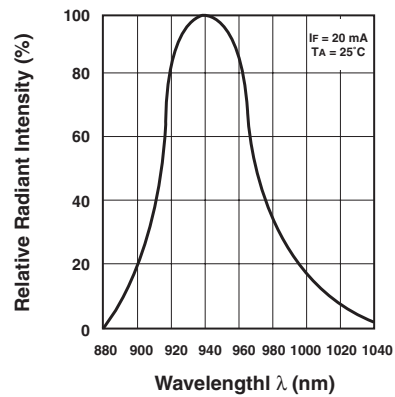


Fig. 3 Peak Emission Wavelength vs. Ambient Temperature

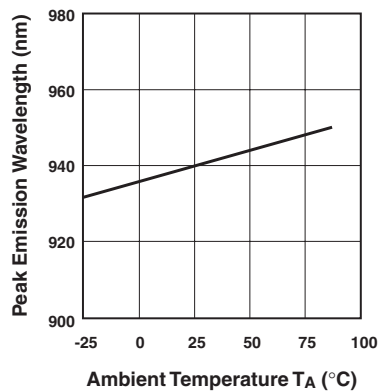


Fig. 4 Forward Current vs. Forward Voltage

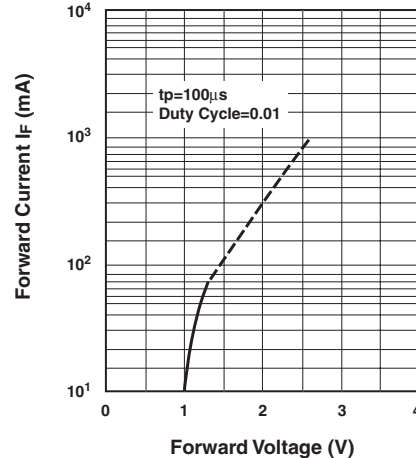


Fig. 5 Relative Intensity vs. Ambient Temperature (°C)

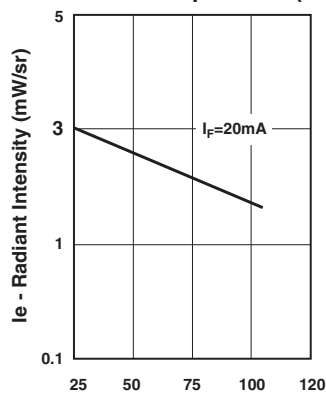
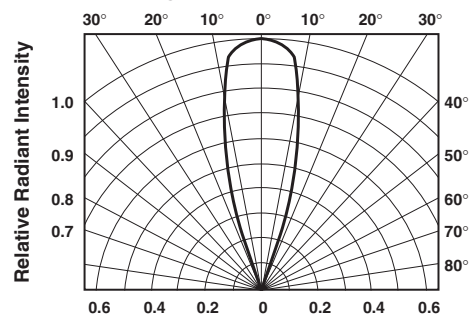
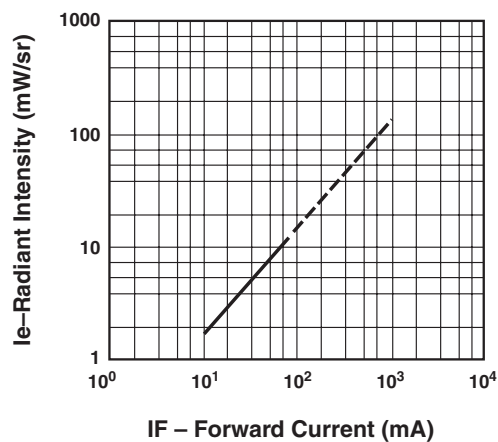


Fig. 6 Relative Radiant Intensity vs. Angular Displacement

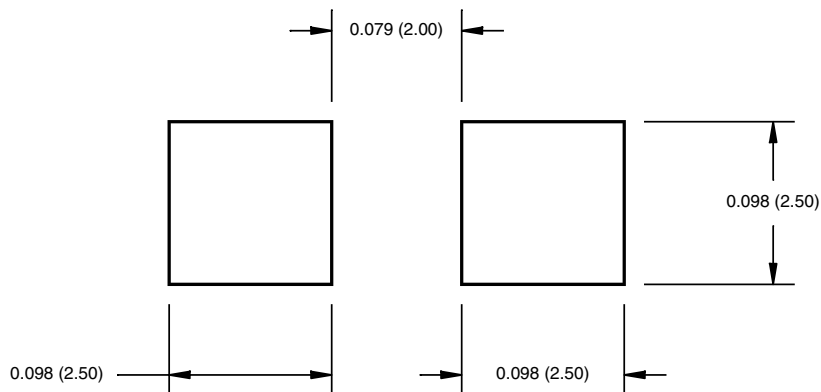


TYPICAL PERFORMANCE CURVES

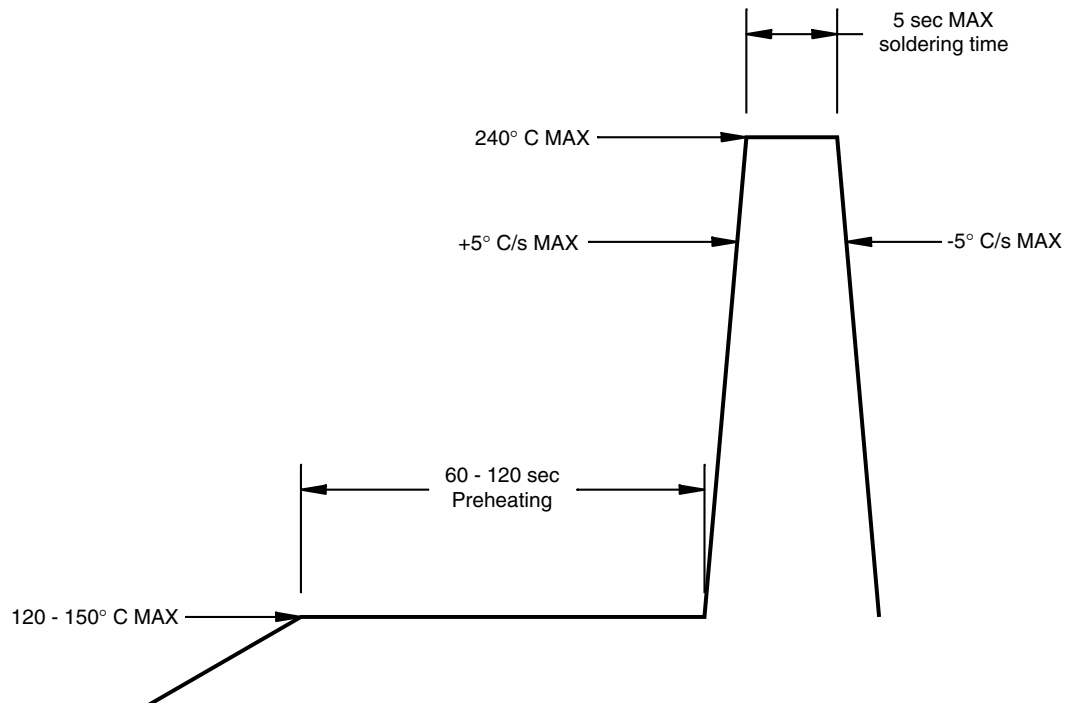
**Fig. 7 Relative Intensity vs.
Forward Current**



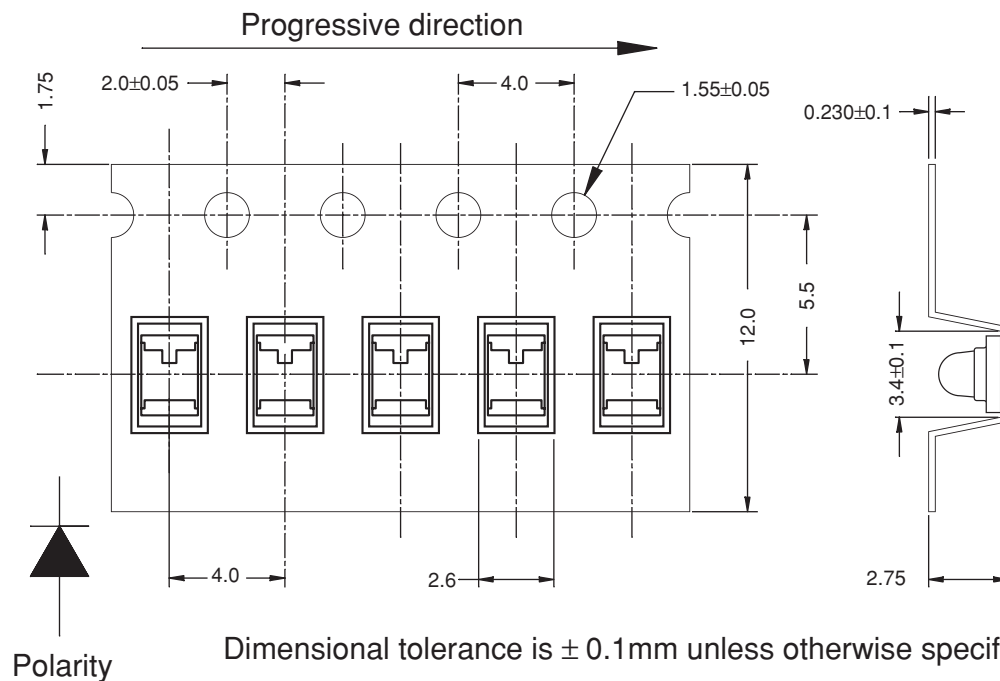
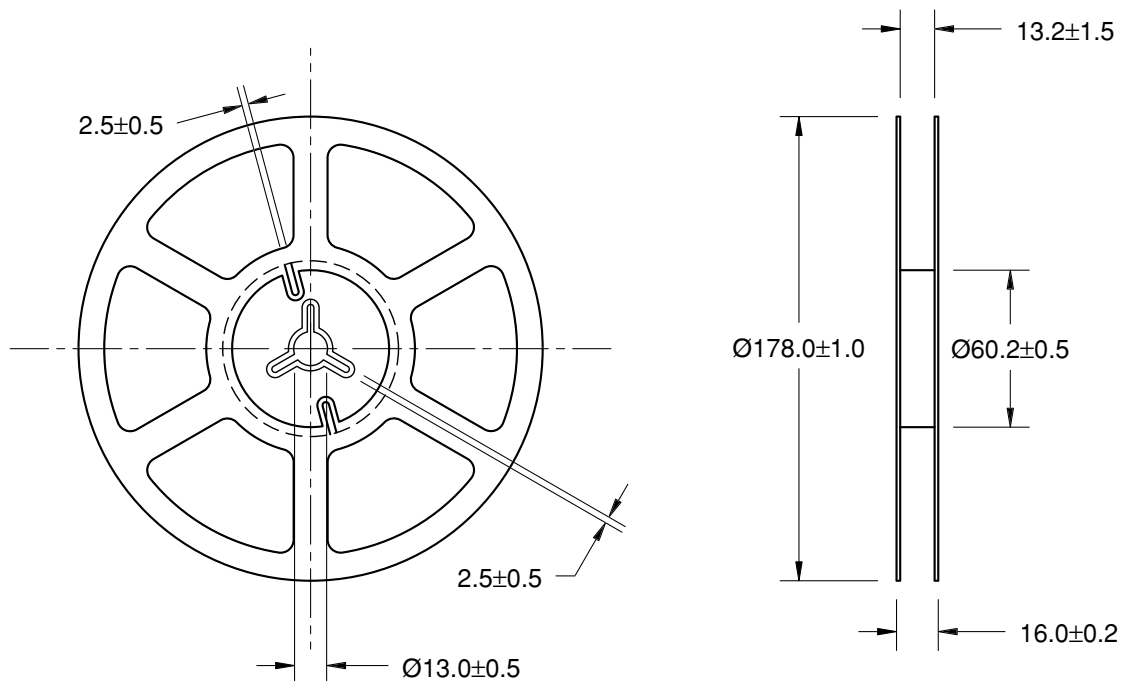
RECOMMENDED PRINTED CIRCUIT BOARD PATTERN



RECOMMENDED IR REFLOW SOLDERING PROFILE



TAPE AND REEL DIMENSIONS



Dimensional tolerance is $\pm 0.1\text{mm}$ unless otherwise specified

Angle: ± 0.5

Unit: mm

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.