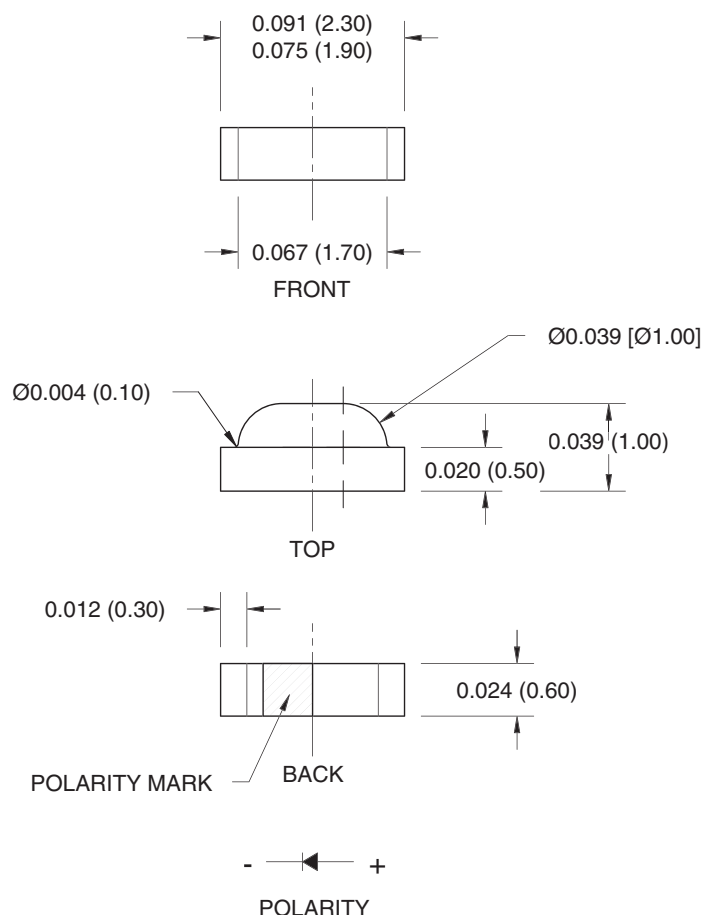
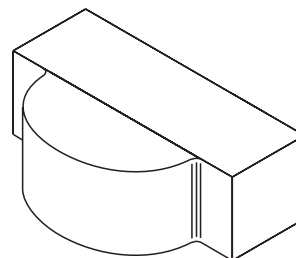


PACKAGE DIMENSIONS



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



Applications

- LCD edge-lighting
- Edge card lighting

Description

This compact right angle surface mount chip LED emits light in the lateral direction. Miniature size and wide viewing angle make this LED an ideal choice for edge-lighting LCD displays. This device utilizes an InGaN/Sapphire blue LED.

Features

- Miniature footprint - 2.1(L) X 1.0(W) X 0.6(H) mm
- Wide viewing angle of 130°
- Water clear optics
- Available in 0.315" (8mm) width tape on 7" (178mm) diameter reel; 2,000 units per reel

Low V_F Blue

QTLP611C-EB

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	$^\circ\text{C}$
Lead Soldering Time	T_{SOL}	260 for 5 sec	$^\circ\text{C}$
Continuous Forward Current	I_F	30	mA
Peak Forward Current ($f = 1.0 \text{ KHz}$, Duty Factor = 1/10)	I_{FM}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	80	mW

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

Part Number	QTLP611C-EB.7773D	Condition
Luminous Intensity (mcd) Bin I2 Bin I3	8 - 16 13 - 26	$I_F = 5\text{mA}$
Forward Voltage (V) Bin V1 Bin V2	2.75 - 2.95 2.95 - 3.15	$I_F = 5\text{mA}$
Dominant Wavelength (nm) Bin W2 Bin W3	470 - 475 475 - 480	$I_F = 5\text{mA}$
Spectral Line Half Width (nm)	35	$I_F = 5\text{mA}$
Viewing Angle ($^\circ$)	130	$I_F = 5\text{mA}$

Low V_F Blue

QTLP611C-EB

TYPICAL PERFORMANCE CURVES

Fig. 1 Forward Current vs. Forward Voltage

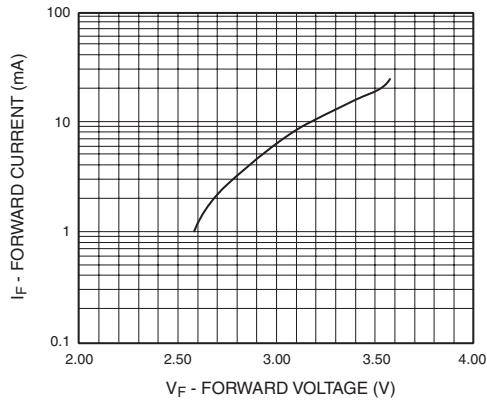


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

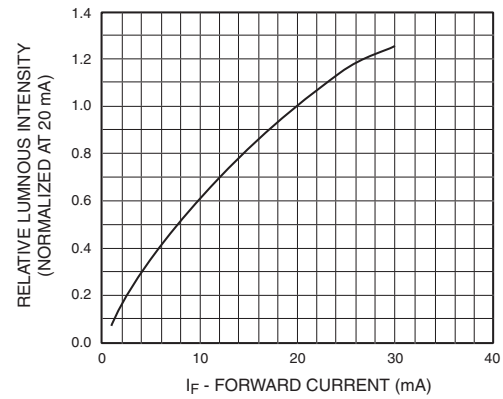


Fig. 3 Relative Intensity vs. Peak Wavelength

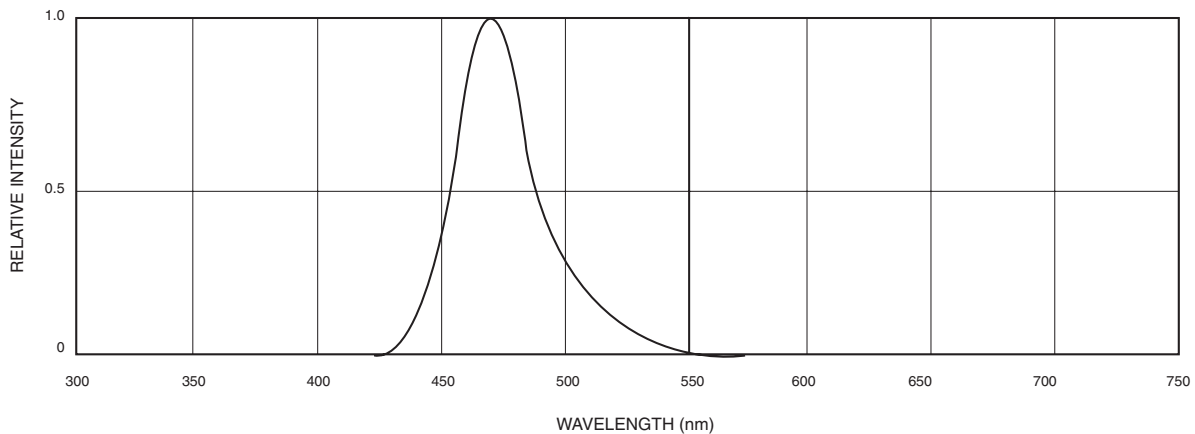


Fig. 4 Radiation Diagram

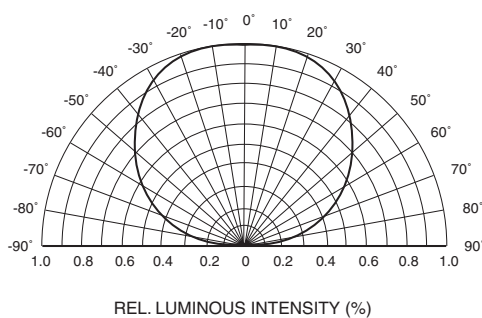
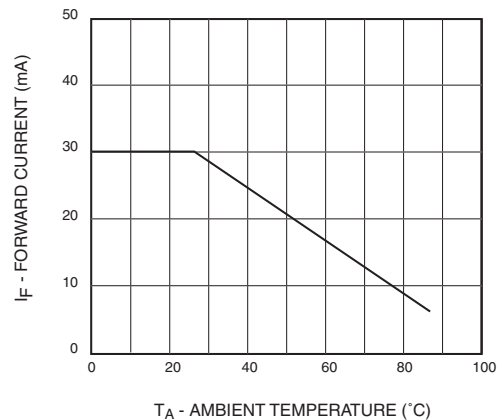


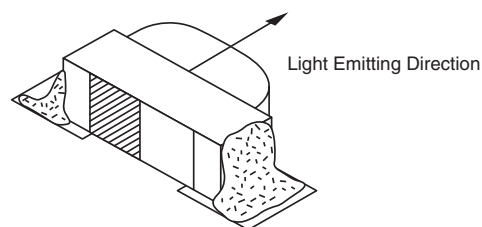
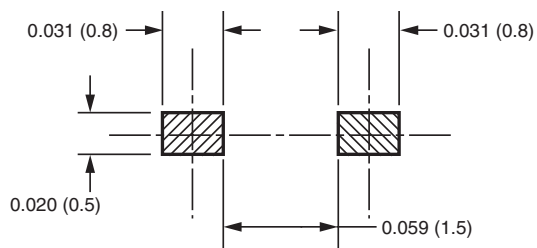
Fig. 5 Maximum Forward Current vs. Ambient Temperature



Low V_F Blue

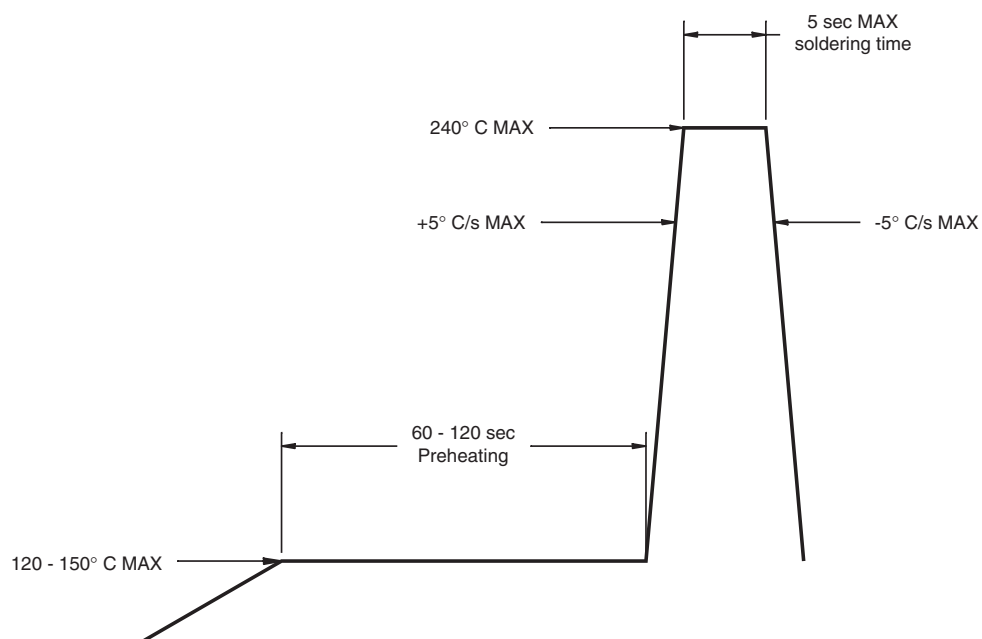
QTLP611C-EB

RECOMMENDED PRINTED CIRCUIT BOARD PATTERN



Mounting Example

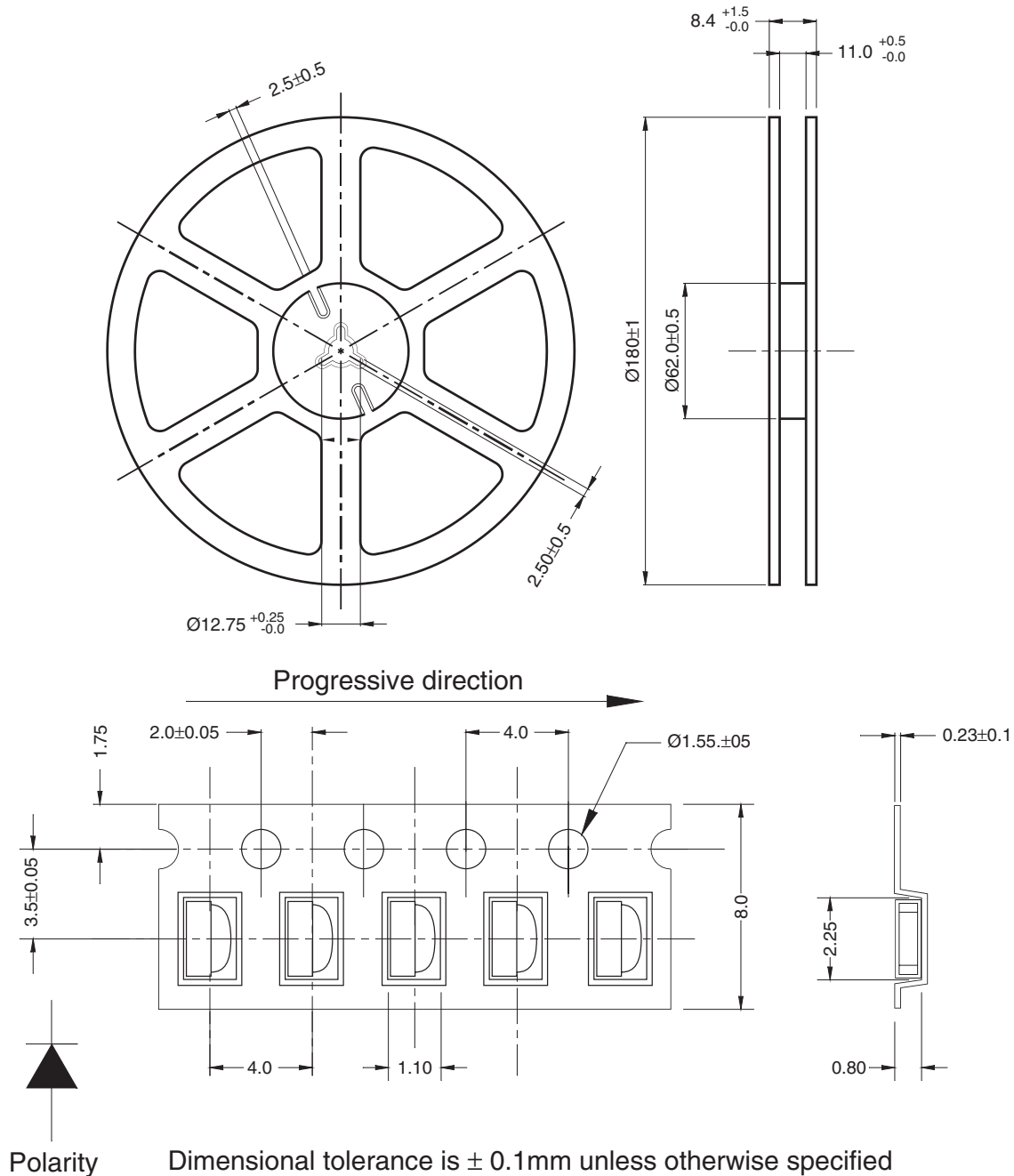
RECOMMENDED IR REFLOW SOLDERING PROFILE



Low V_F Blue

QTLP611C-EB

TAPE AND REEL DIMENSIONS



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

Angle: ± 0.5

Unit: mm

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