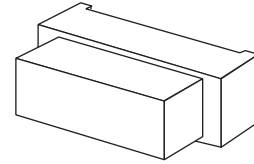
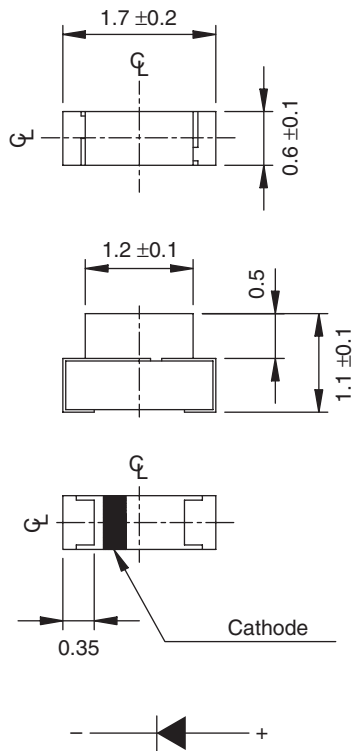


Low V_F Blue

QTLP613C-EB

PACKAGE DIMENSIONS



NOTE:

Dimensions for all drawings are in millimeters.

APPLICATIONS

- LCD edge-lighting
- Edge card lighting

DESCRIPTION

This 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 - 1.7 (L) X 1.1 (W) X 0.6 (H) mm
- Low V_F
- Wide viewing angle of 140°
- Water clear optics
- Available in 0.315 " (8mm) width tape on 7 " (178mm) diameter reel; 2,000 units per reel

Low V_F Blue

QTLP613C-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	QTLP613C-EB	Condition
Luminous Intensity (mcd)		$I_F = 5 \text{ mA}$
Bin I1	8 - 16	
Bin I2	13 - 26	
Forward Voltage (V)		$I_F = 5 \text{ mA}$
Bin V1	2.75 - 2.95	
Bin V2	2.95 - 3.15	
Dominant Wavelength (nm)		$I_F = 5 \text{ mA}$
Bin W1	465 - 470	
Bin W2	470 - 475	
Spectral Line Half Width (nm)	35	$I_F = 5 \text{ mA}$
Viewing Angle ($^\circ$)	140	$I_F = 5 \text{ mA}$

Low V_F Blue

QTLP613C-EB

TYPICAL PERFORMANCE CURVES

Fig. 1 Forward Current vs. Forward Voltage

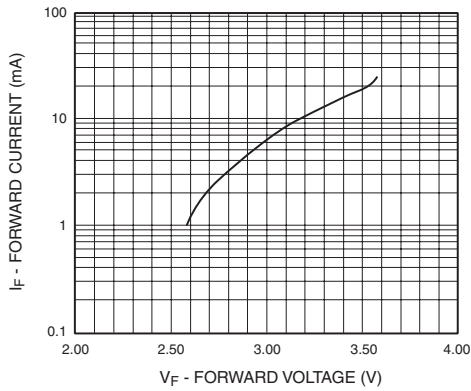


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

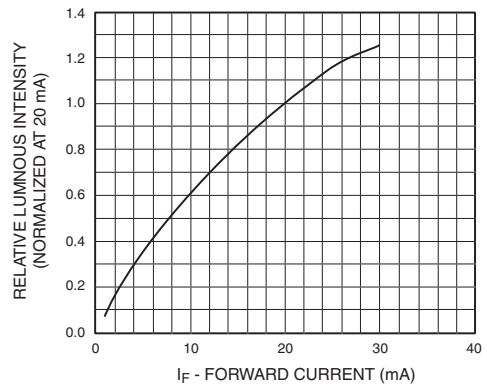


Fig. 3 Relative Intensity vs. Peak Wavelength

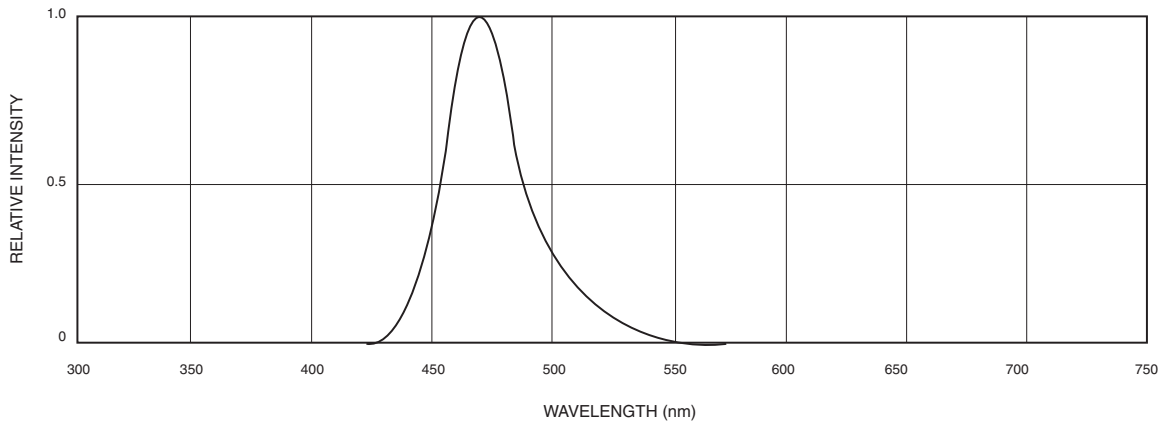


Fig.4 Radiation Diagram

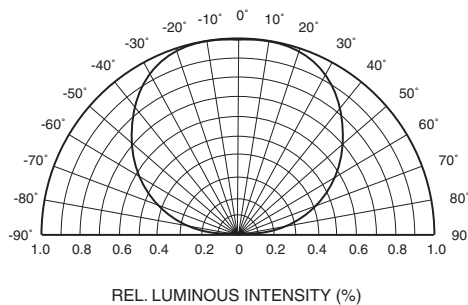
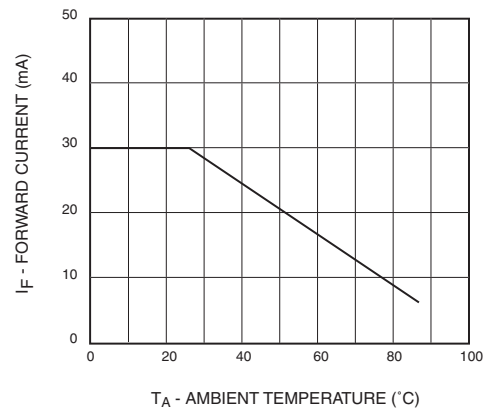


Fig.5 Maximum Forward Current vs. Ambient Temperature

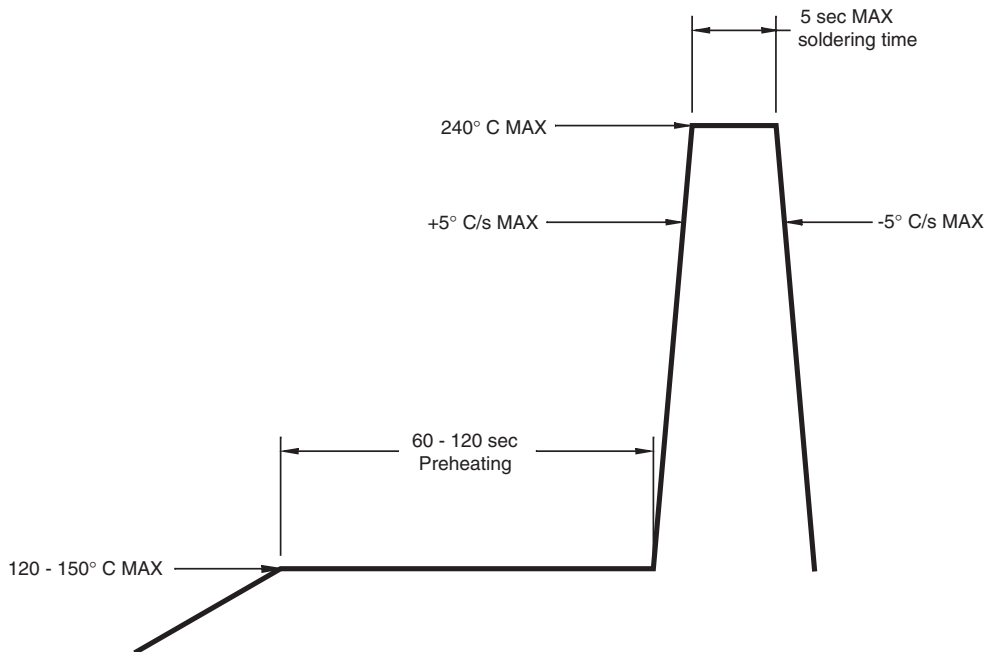


Low V_F Blue

QTLP613C-EB

RECOMMENDED PRINTED CIRCUIT BOARD PATTERN

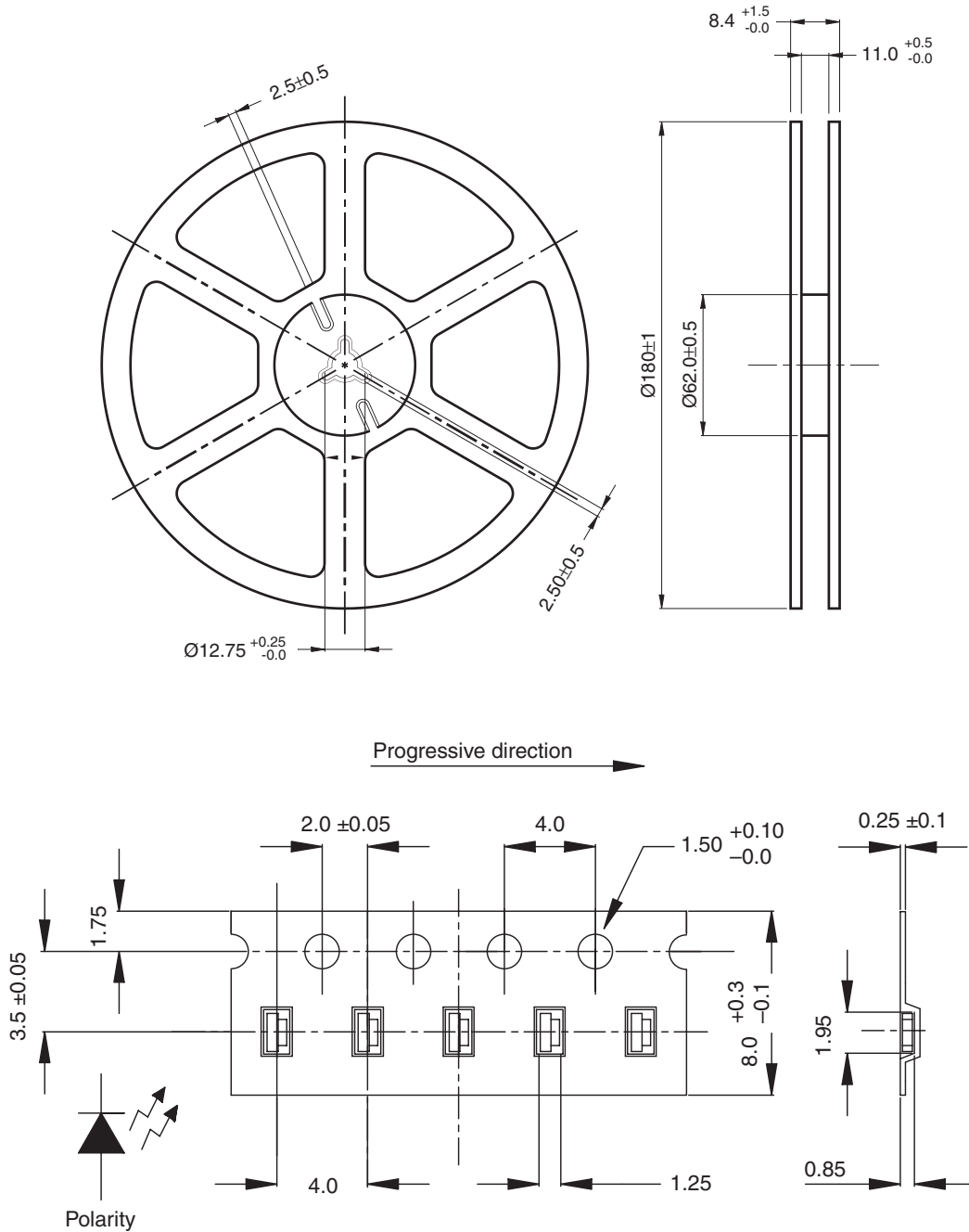
RECOMMENDED IR REFLOW SOLDERING PROFILE



Low V_F Blue

QTLP613C-EB

TAPE AND REEL DIMENSIONS



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