

QTLP630C-2 HER

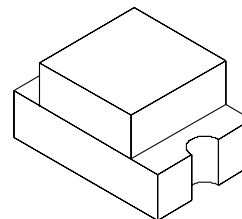
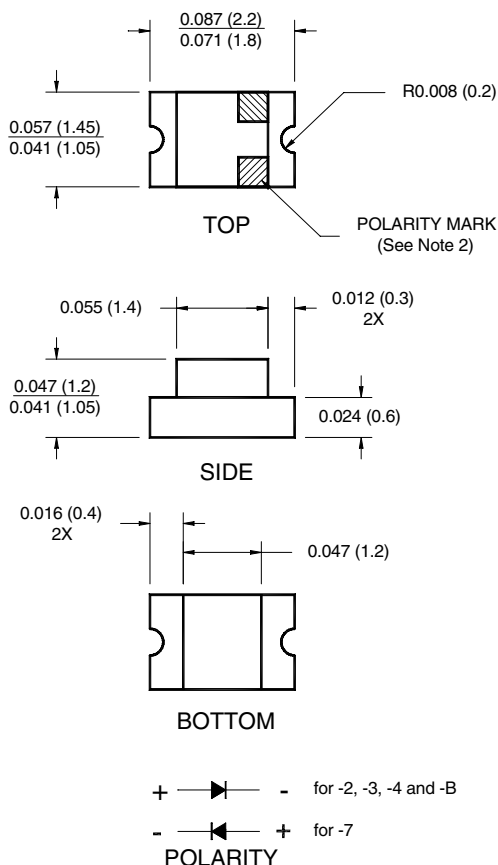
QTLP630C-3 Yellow

QTLP630C-4 Green

QTLP630C-7 AlGaAs Red

QTLP630C-B Blue

### PACKAGE DIMENSIONS



#### NOTE:

1. Dimensions for all drawings are in inches (mm).
2. Cathode for -2, -3, -4 and B. Anode for -7.

### APPLICATIONS

- Keypad backlighting
- Push-button backlighting
- LCD backlighting

### DESCRIPTION

These surface mount chip LEDs are designed to fit industry standard footprint. Low profile and wide viewing angle make these LEDs ideal choices for backlighting applications and panel illumination.

### FEATURES

- Small footprint - 2.0(L) X 1.25(W) X 1.1(H) mm
- Wide viewing angle of 140°
- Water clear optics
- Moisture-proof packaging
- Available in 0.315" (8mm) width tape on 7" (178mm) diameter reel; 2,000 units per reel

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**QTLP630C-B** Blue

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C Unless otherwise specified)

Parameter	Symbol	QTLP630C					Units
		-2	-3	-4	-7	-B	
Continuous Forward Current	I <sub>F</sub>	30	30	30	30	30	mA
Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10)	I <sub>FM</sub>	160	160	160	180	100	mA
Reverse Voltage (I <sub>R</sub> = 10 µA)	V <sub>R</sub>	5	5	5	5	5	V
Power Dissipation	P <sub>D</sub>	84	84	84	72	135	mW
Operating Temperature	T <sub>OPR</sub>	-40 to +85					°C
Storage Temperature	T <sub>STG</sub>	-40 to +90					°C
Lead Soldering Time	T <sub>SOL</sub>	260 for 5 sec					°C

### ELECTRICAL / OPTICAL CHARACTERISTICS (T<sub>A</sub> = 25°C)

Part Number	Symbol	QTLP630C					Condition
		-2	-3	-4	-7	-B	
Luminous Intensity (mcd)	I <sub>V</sub>	5	5	6	10	15	I <sub>F</sub> = 20mA
Minimum							
Typical		10	10	10	20	20	
Forward Voltage (V)	V <sub>F</sub>	2.8	2.8	2.8	2.4	4.5	I <sub>F</sub> = 20mA
Maximum							
Typical		2.0	2.0	2.1	1.9	3.8	
Wavelength (nm)	λ <sub>P</sub>	635	585	565	660	430	I <sub>F</sub> = 20mA
Peak							
Dominant	λ <sub>D</sub>	630	590	570	645	465	
Spectral Line Half Width (nm)	Δλ	45	35	30	20	65	I <sub>F</sub> = 20mA
Viewing Angle (°)	2Θ <sub>1/2</sub>	140	140	140	140	140	I <sub>F</sub> = 20mA

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### TYPICAL PERFORMANCE CURVES

Fig. 1 Forward Current vs. Forward Voltage

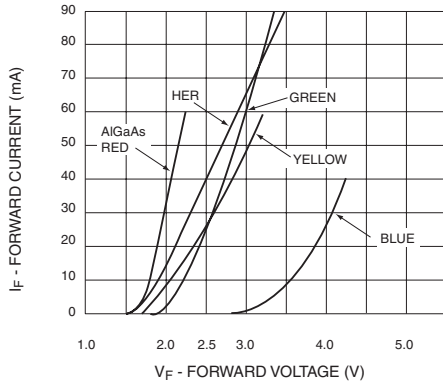


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

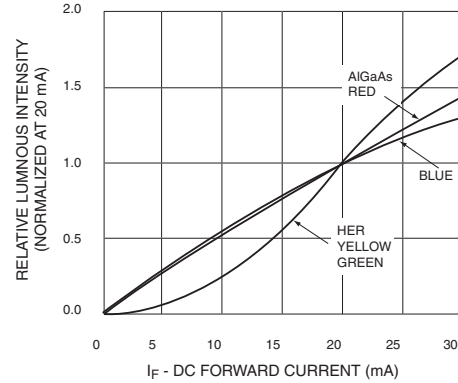


Fig. 3 Relative Intensity vs. Peak Wavelength

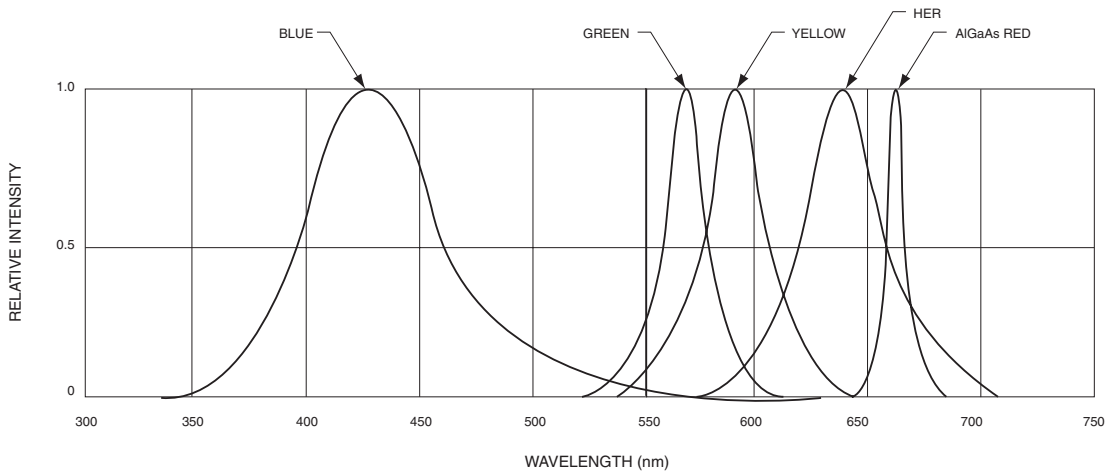


Fig.4 Radiation Diagram

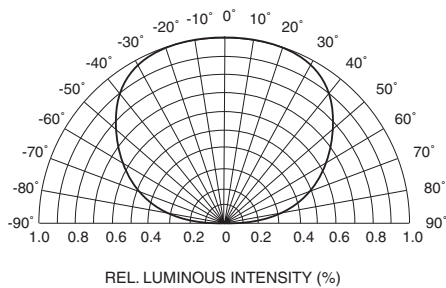
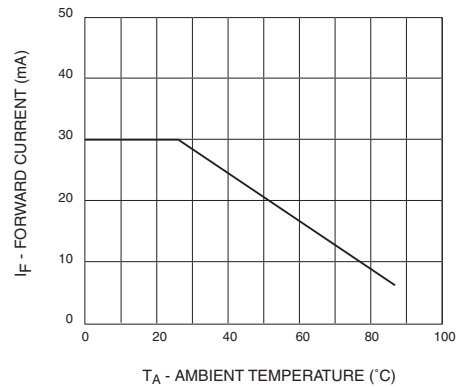


Fig.5 Maximum Forward Current vs. Ambient Temperature



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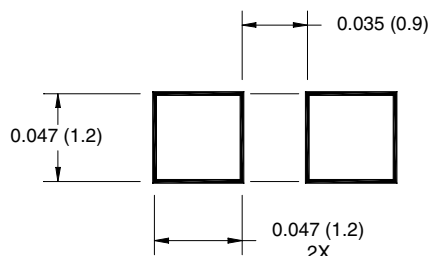
**QTLP630C-3** Yellow

**QTLP630C-4** Green

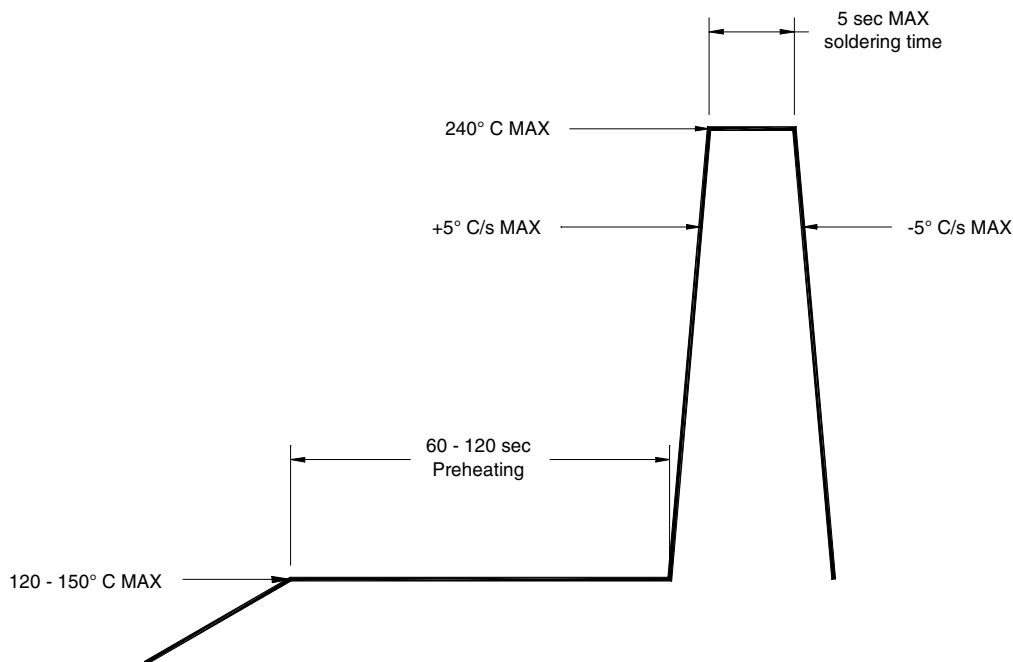
**QTLP630C-7** AlGaAs Red

**QTLP630C-B** Blue

### RECOMMENDED PRINTED CIRCUIT BOARD PATTERN



### RECOMMENDED IR REFLOW SOLDERING PROFILE



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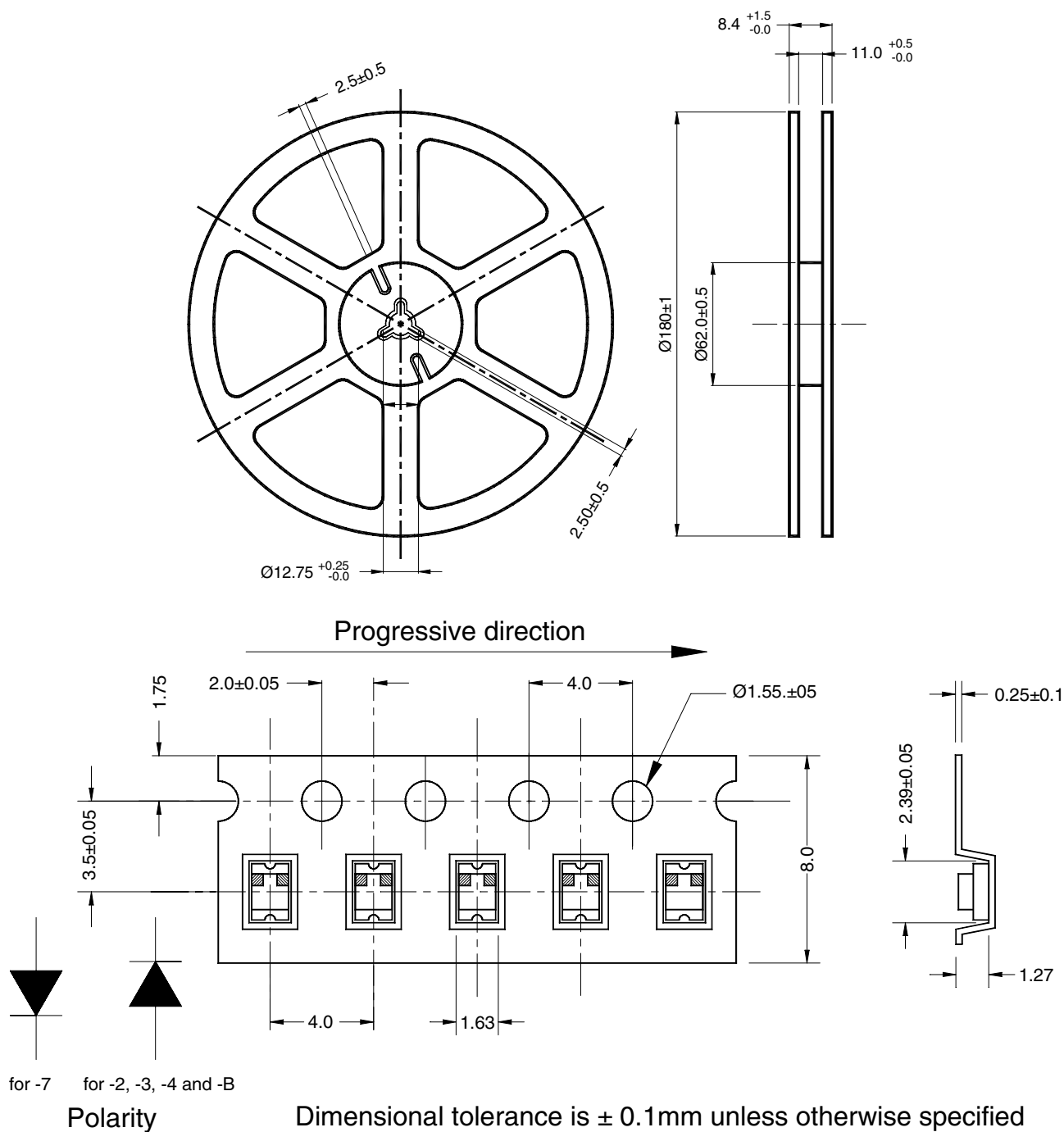
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### TAPE AND REEL DIMENSIONS



Dimensional tolerance is  $\pm 0.1$  mm unless otherwise specified

Angle:  $\pm 0.5$

Unit: mm

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QTLP630C-B

Yellow/Green Surface Mount LED Lamp - Standard Bright 1210

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General description

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Features

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Applications

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Product status/pricing/packaging

Product	Product status	Pricing*	Inventory check & ordering	Package type	Packing method
QTLP630CBTR	Full Production	\$0.392	<div>Purchase</div>	SMD	BOX

\* Fairchild 1,000 piece Budgetary Pricing

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