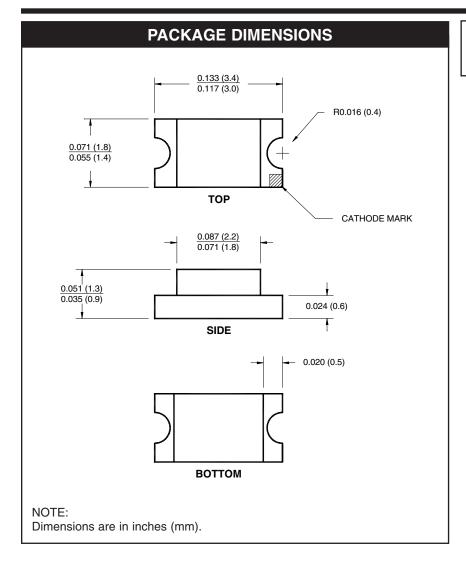
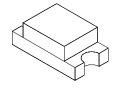


(1206) Chip Type - Water Clear



PURE GREEN QTLP650C-5 ORANGE QTLP650C-8



#### **FEATURES**

- Ultra-miniature and extremely low profile
- · Industrial standard footprint
- Wide viewing angle of 140°
- · Water clear optics
- · Moisture-proof packaging

### **DESCRIPTION**

These surface mount lamps are designed to fit industry standard profile and footprint for ultraminiature chip type 1206. The low profile and 140° viewing angle, moisture-proof packaging makes this chip type LED ideal for panel illumination, push-button backlighting and membrane switch applications.

ABSOLUTE MAXIMUM RATINGS (T <sub>A</sub> = 25°C unless otherwise specified)					
Parameter	Pure Green QTLP650C-5	Orange QTLP650C-8	Units		
Continuous Forward Current - I <sub>F</sub>	30	30	mA		
Peak Forward Current - I <sub>F</sub> (f = 1.0 KHz, Duty Factor = 1/10)	160	160	mA		
Reverse Voltage - V <sub>R</sub> (I <sub>R</sub> = 10 μA)	5	5	V		
Power Dissipation - P <sub>D</sub>	100	100	mW		
Operating Temperature - T <sub>OPR</sub>	-40 to +100		°C		
Storage Temperature - T <sub>STG</sub>	-40 to +100		°C		
Lead Soldering Time - T <sub>SOL</sub>					
Wave	260 fc	°C			
Reflow	260 for 10 sec				

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(1206) Chip Type - Water Clear

PURE GREEN QTLP650C-5 ORANGE QTLP650C-8

ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C)				
Part Number	Pure Green QTLP650C-5	Orange QTLP650C-8	Condition	
Luminous Intensity (mcd)			I <sub>F</sub> = 20 mA	
Minimum	1.5	3.0		
Typical	3.5	6.0		
Forward Voltage (V)			I <sub>F</sub> = 20 mA	
Maximum	2.8	2.8		
Typical	2.1	2.1		
Peak Wavelength (nm)	555	610	I <sub>F</sub> = 20 mA	
Spectral Line Half Width (nm)	30	40	$I_F = 20 \text{ mA}$	
Viewing Angle (°)	140	140	I <sub>F</sub> = 20 mA	

### TYPICAL PERFORMANCE CURVES

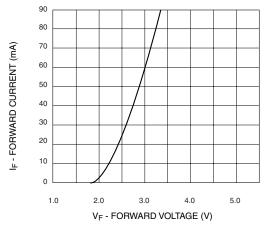


Fig. 1 Forward Current vs. Forward Voltage

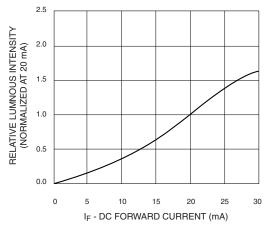


Fig. 2 Relative Luminous Intensity vs. DC Forward Current

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(1206) Chip Type - Water Clear

**PURE GREEN QTLP650C-5 ORANGE** 

**QTLP650C-8** 

### **TYPICAL PERFORMANCE CURVES**

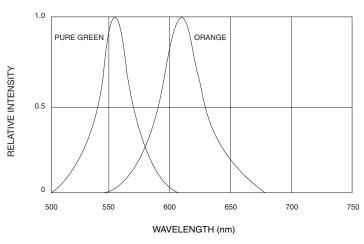


Fig. 3 Relative Intensity vs. Peak Wavelength

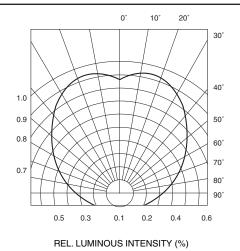


Fig. 4 Radiation Diagram

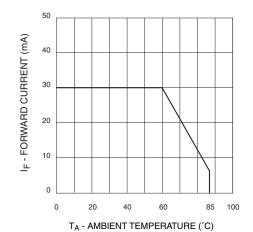


Fig. 5 Current Derating Curve

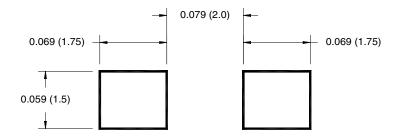
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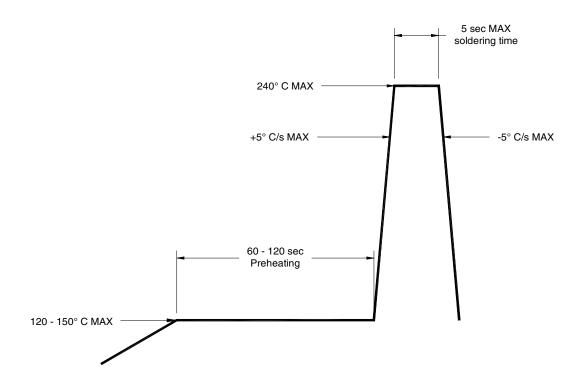
(1206) Chip Type - Water Clear

PURE GREEN QTLP650C-5 ORANGE QTLP650C-8

### RECOMMENDED PRINTED CIRCUIT BOARD PATTERN



### RECOMMENDED IR REFLOW SOLDERING PROFILE





(1206) Chip Type - Water Clear

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