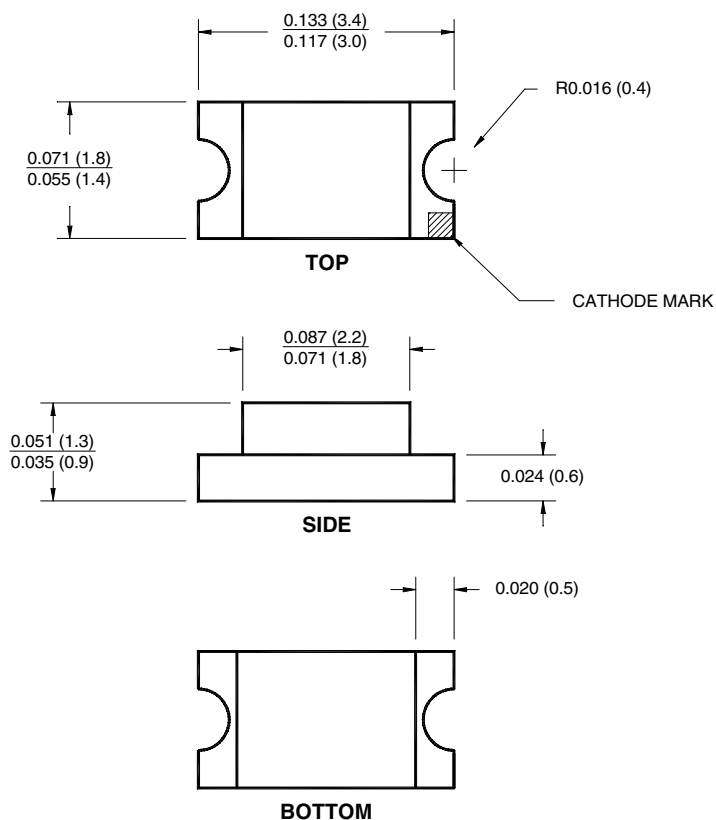


SURFACE MOUNT LED LAMP

SUPER BRIGHT (1206) Chip Type - Water Clear

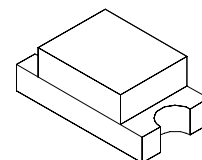
PACKAGE DIMENSIONS



NOTE:
Dimensions are in inches (mm).

BLUE

QTLP650C-B



FEATURES

- GaN/SiC technology
- Ultra-miniature and extremely low profile
- Wide viewing angle of 140°
- Water clear optics
- Moisture-proof packaging

DESCRIPTION

This super bright surface mount LED is designed to fit industry standard profile and footprint for ultra-miniature 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_A = 25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Operating Temperature	T _{OPR}	-40 to +90	°C
Storage Temperature	T _{STG}	-40 to +100	°C
Lead Soldering Time-Reflow	T _{SOL}	240 for 5 sec	°C
Continuous Forward Current	I _F	30	mA
Peak Forward Current (f = 1.0 KHz, Duty Factor = 1/10)	I _F	100	mA
Reverse Voltage (I _R = 10 μA)	V _R	5	V
Power Dissipation	P _D	150	mW

BLUE

QTLP650C-B

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

Part Number	QTLP650C-B	Condition
Luminous Intensity (mcd)		I _F = 20 mA
Minimum	20	
Typical	30	
Forward Voltage (V)		I _F = 20 mA
Maximum	4.5	
Typical	3.8	
Peak Wavelength (nm)	430	I _F = 20 mA
Spectral Line Half Width (nm)	65	I _F = 20 mA
Viewing Angle (°)	140	I _F = 20 mA

TYPICAL PERFORMANCE CURVES

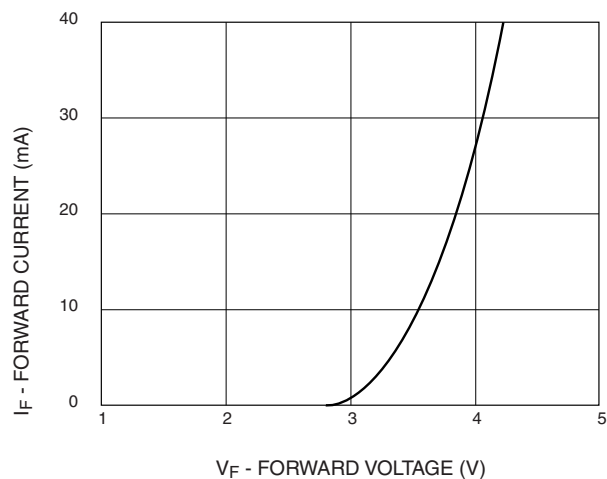


Fig.1 Forward Current vs. Forward Voltage

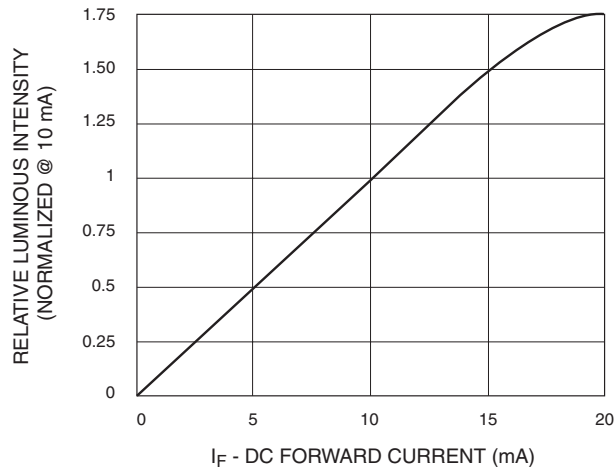


Fig.2 Relative Luminous Intensity vs. DC Forward Current

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QTLP650C-B

TYPICAL PERFORMANCE CURVES

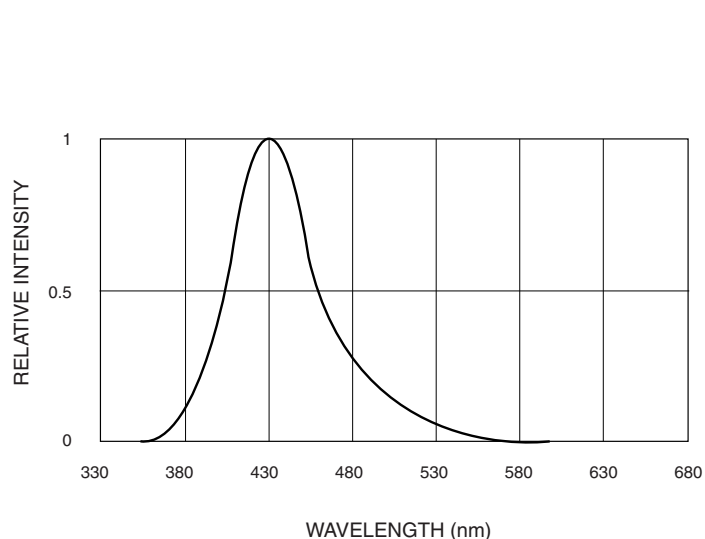


Fig.3 Relative Intensity vs. Peak Wavelength

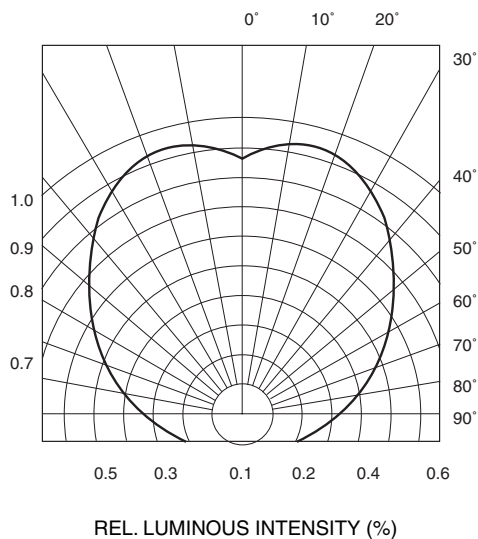


Fig. 4 Radiation Diagram

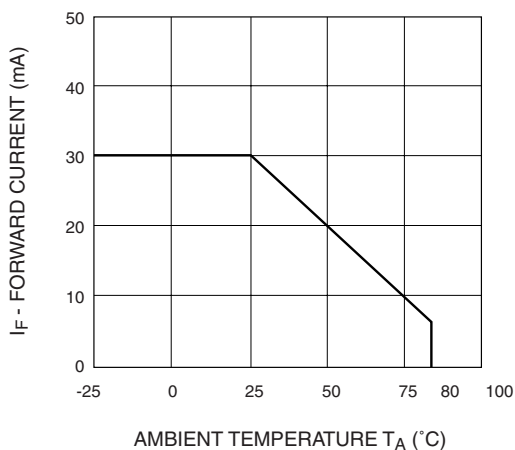
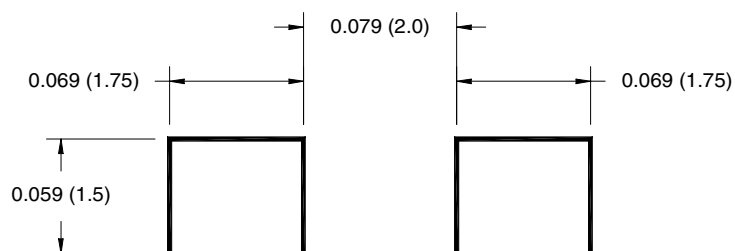


Fig.5 Forward Current vs. Ambient Temperature

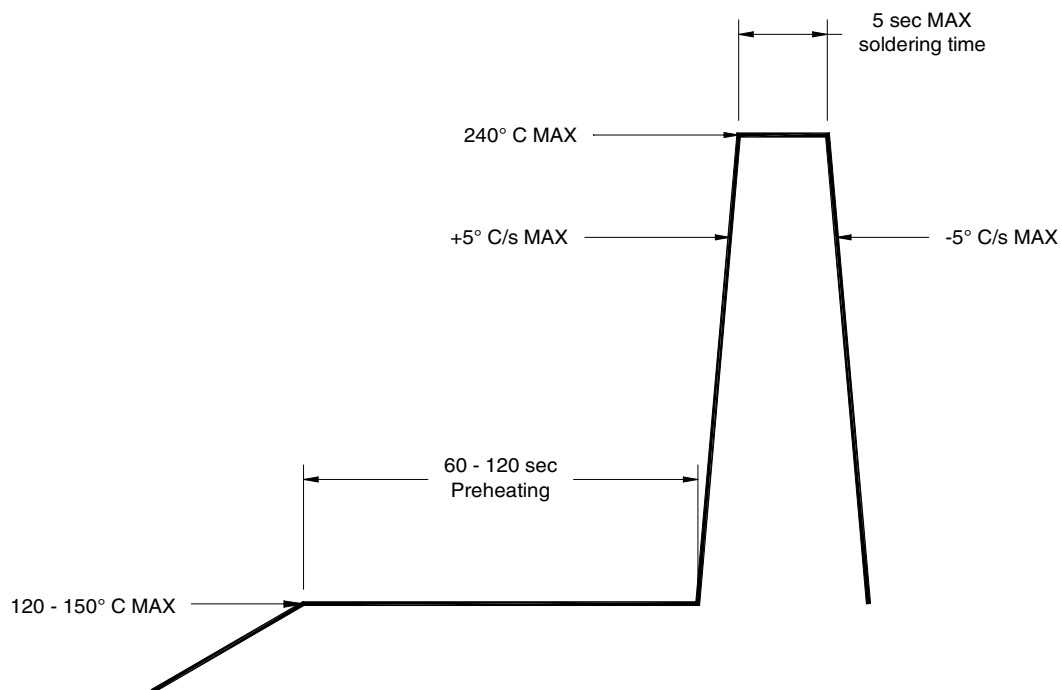
BLUE

QTLP650C-B

RECOMMENDED PRINTED CIRCUIT BOARD PATTERN



RECOMMENDED IR REFLOW SOLDERING PROFILE



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