

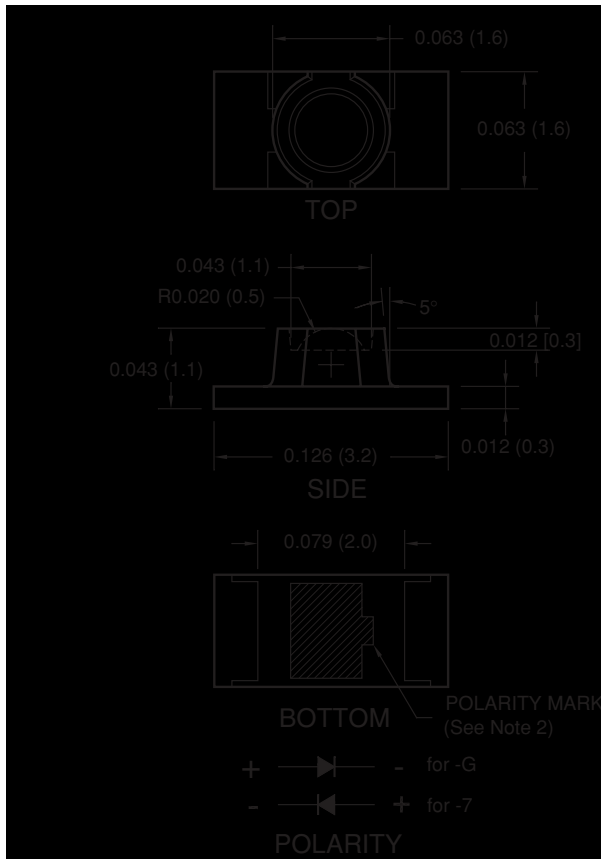
# SURFACE MOUNT LED LAMP

## STANDARD BRIGHT 1206 (Reverse Mount with Inner Lens)

QTLP653C-7 AlGaAs Red

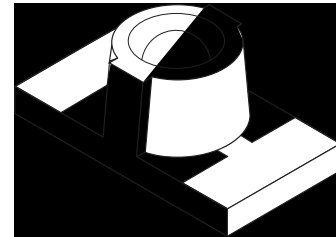
QTLP653C-G Green

### PACKAGE DIMENSIONS



#### NOTE:

1. Dimensions for all drawings are in inches (mm).
2. Cathode for -G. Anode for -7.



### APPLICATIONS

- Keypad backlighting
- Push-button backlighting

### DESCRIPTION

These surface mount chip LEDs are designed to fit industry standard footprint. They are reverse mountable and designed to emit light through a small cut-out hole in the PC board.

### FEATURES

- Small footprint - 3.2(L) X 1.6(W) X 1.1(H) mm
- Wide viewing angle of 130°
- 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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**QTLP653C-G** Green

<b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A = 25^\circ\text{C}$ Unless otherwise specified)				
Parameter	Symbol	QTLP653C		Units
		-7	-G	
Continuous Forward Current	$I_F$	30	30	mA
Peak Forward Current ( $f = 1.0 \text{ KHz}$ , Duty Factor = 1/10)	$I_{FM}$	180	100	mA
Reverse Voltage	$V_R$	5	5	V
Power Dissipation	$P_D$	72	84	mW
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		$^\circ\text{C}$

<b>ELECTRICAL / OPTICAL CHARACTERISTICS</b> ( $T_A = 25^\circ\text{C}$ )				
Part Number	Symbol	QTLP653C		Condition
		-7	-G	
Luminous Intensity (mcd)	$I_V$	25	15	$I_F = 20\text{mA}$
Minimum				
Typical		50	35	
Forward Voltage (V)	$V_F$	2.4	2.8	$I_F = 20\text{mA}$
Maximum				
Typical		1.9	2.1	
Wavelength (nm)	$\lambda_P$	660	565	$I_F = 20\text{mA}$
Peak				
Dominant	$\lambda_D$	645	570	
Spectral Line Half Width (nm)	$\Delta\lambda$	20	30	$I_F = 20\text{mA}$
Viewing Angle ( $^\circ$ )	$2\theta_{1/2}$	130	130	$I_F = 20\text{mA}$

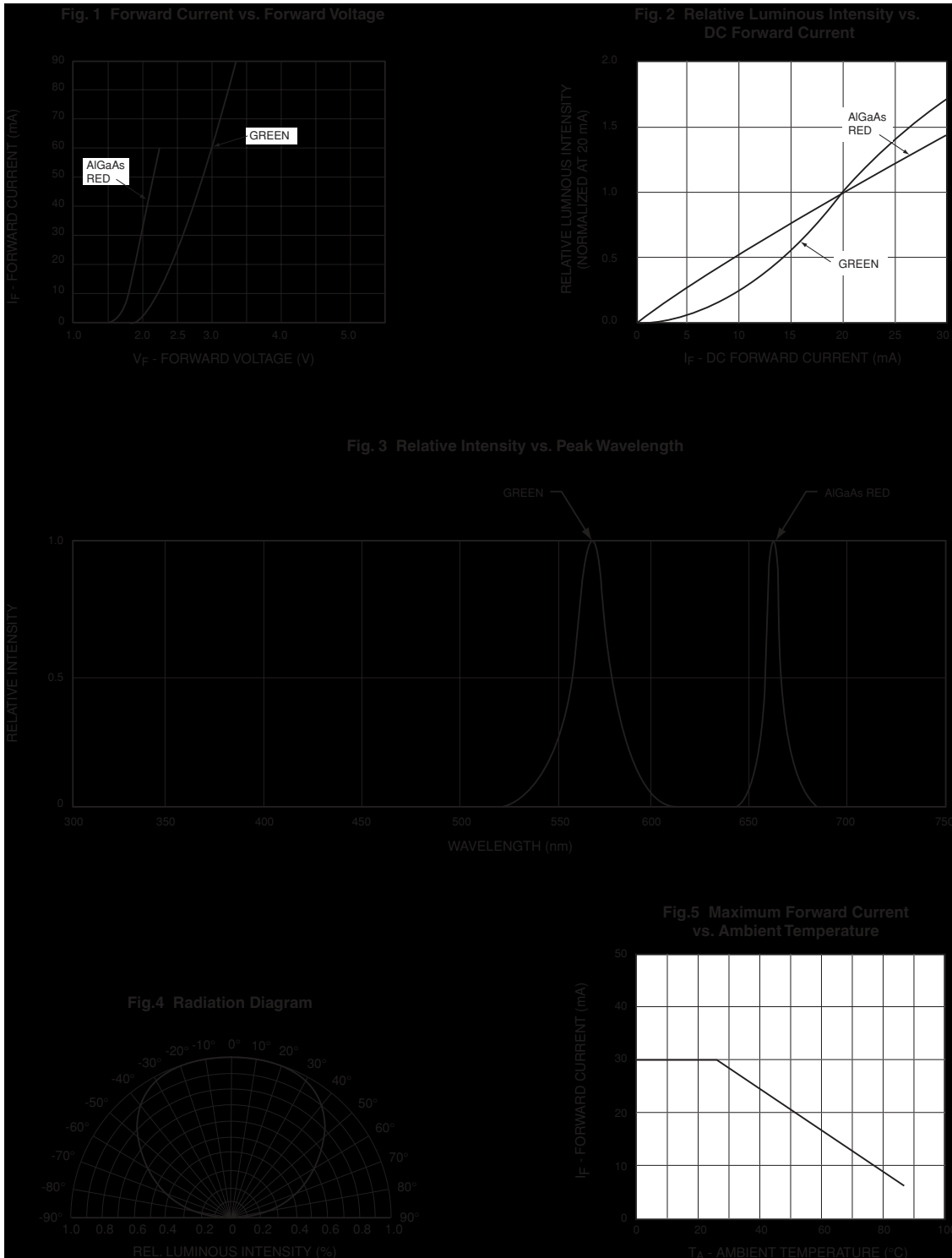
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### TYPICAL PERFORMANCE CURVES



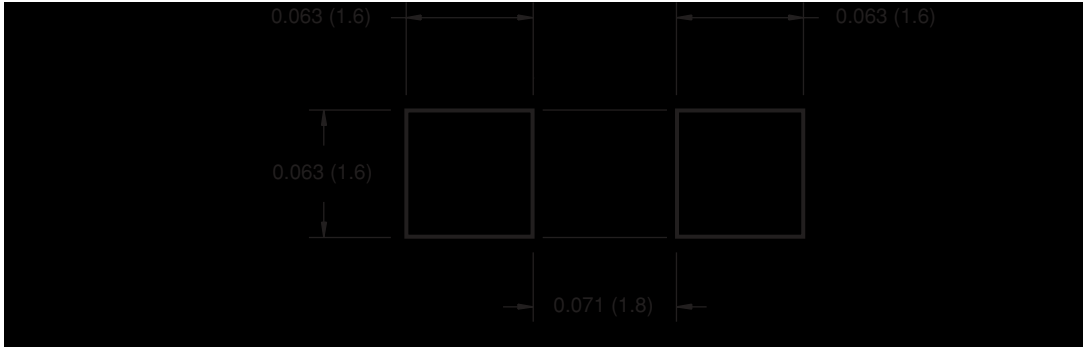
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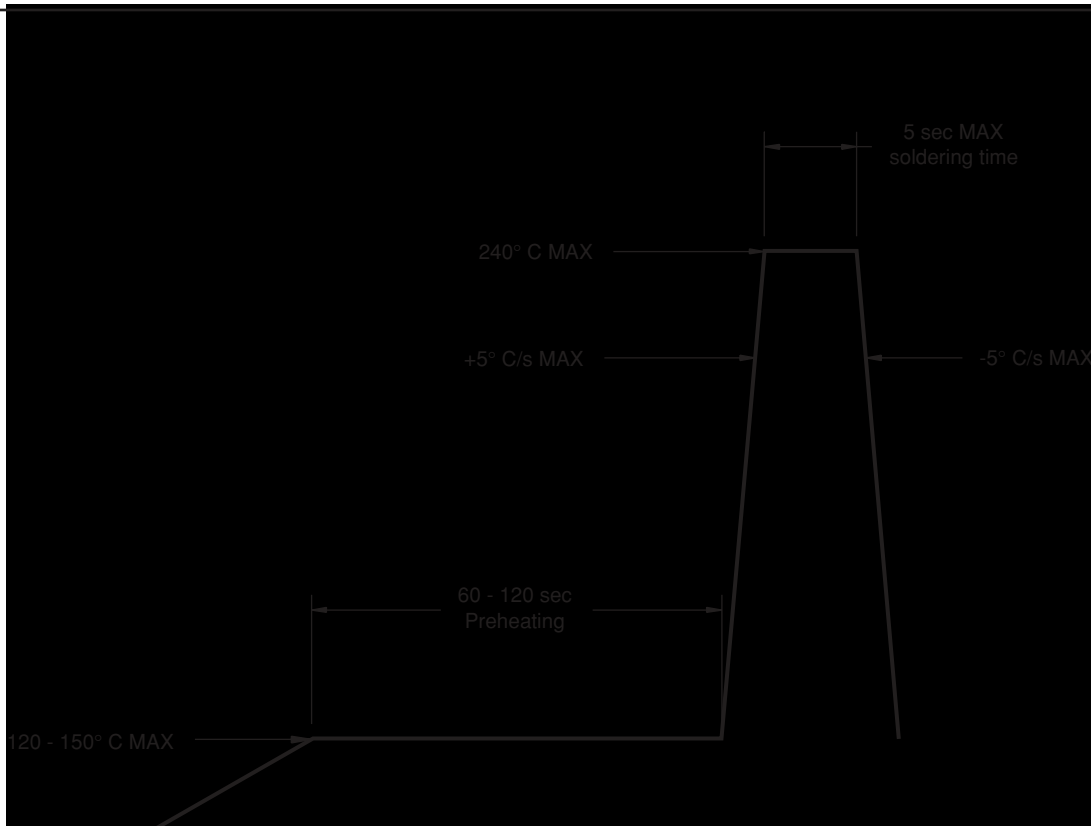
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## RECOMMENDED PRINTED CIRCUIT BOARD PATTERN



## RECOMMENDED IR REFLOW SOLDERING PROFILE



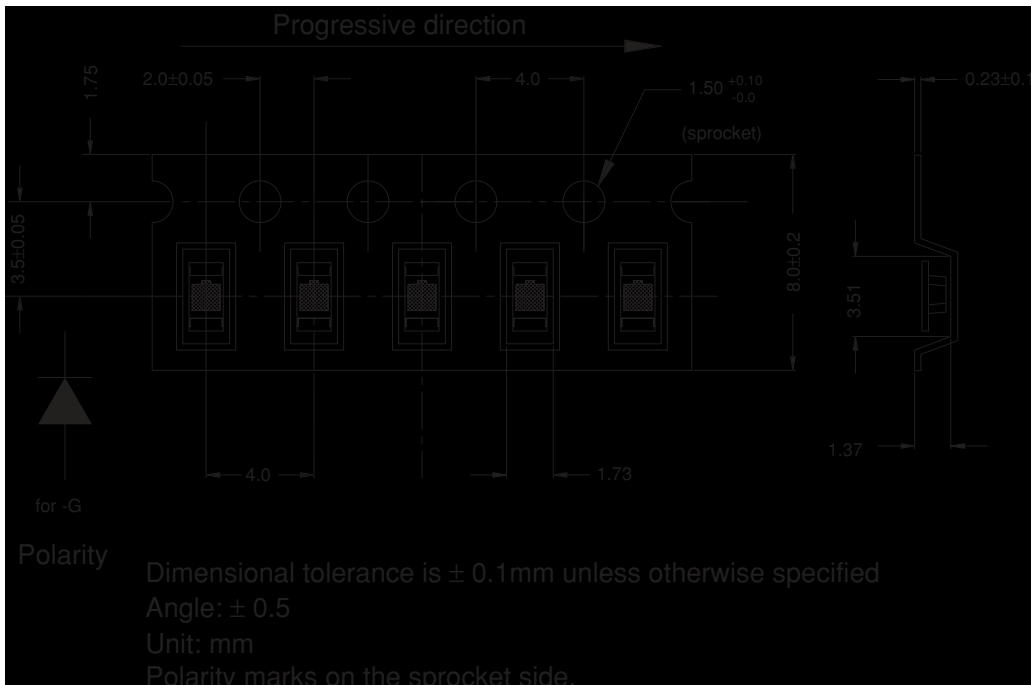
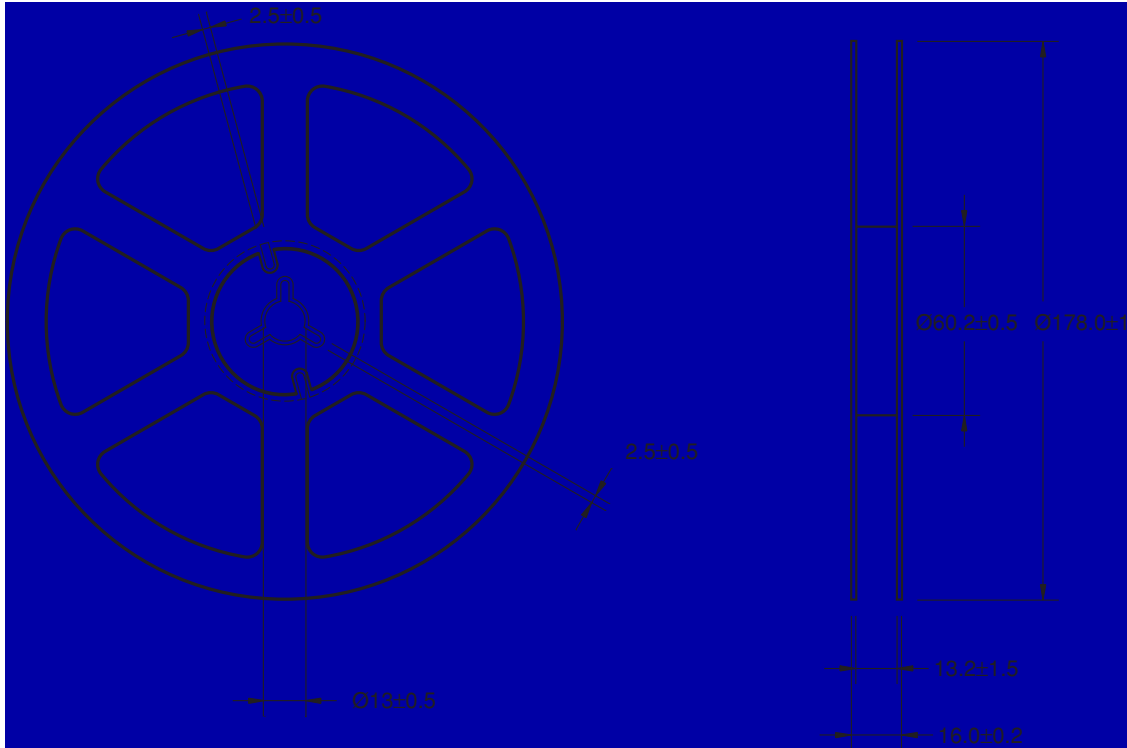
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## TAPE AND REEL DIMENSIONS



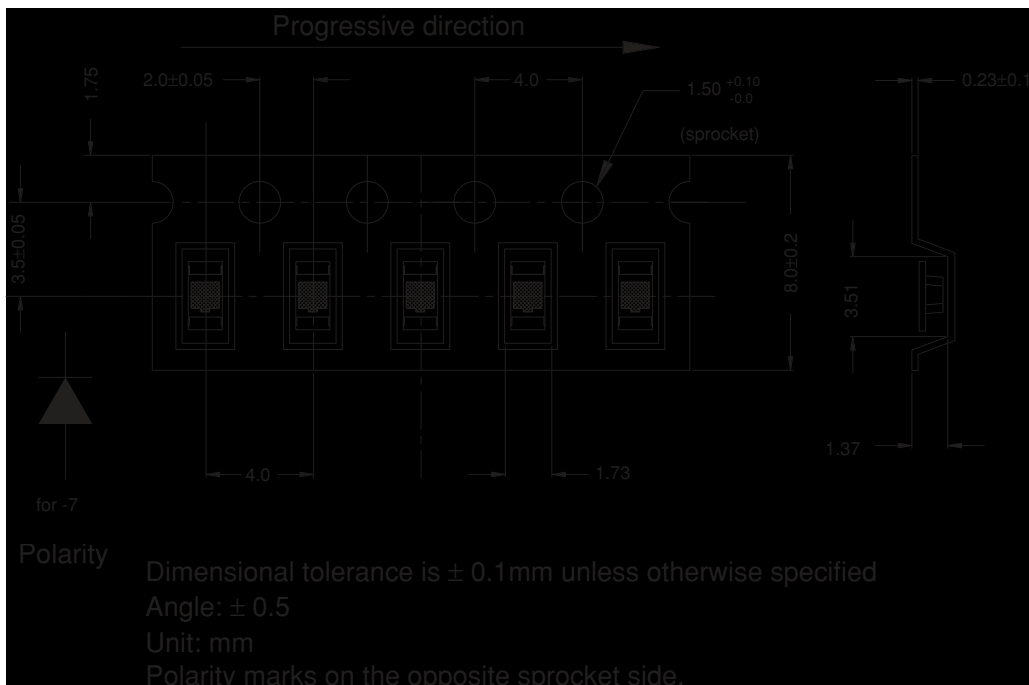
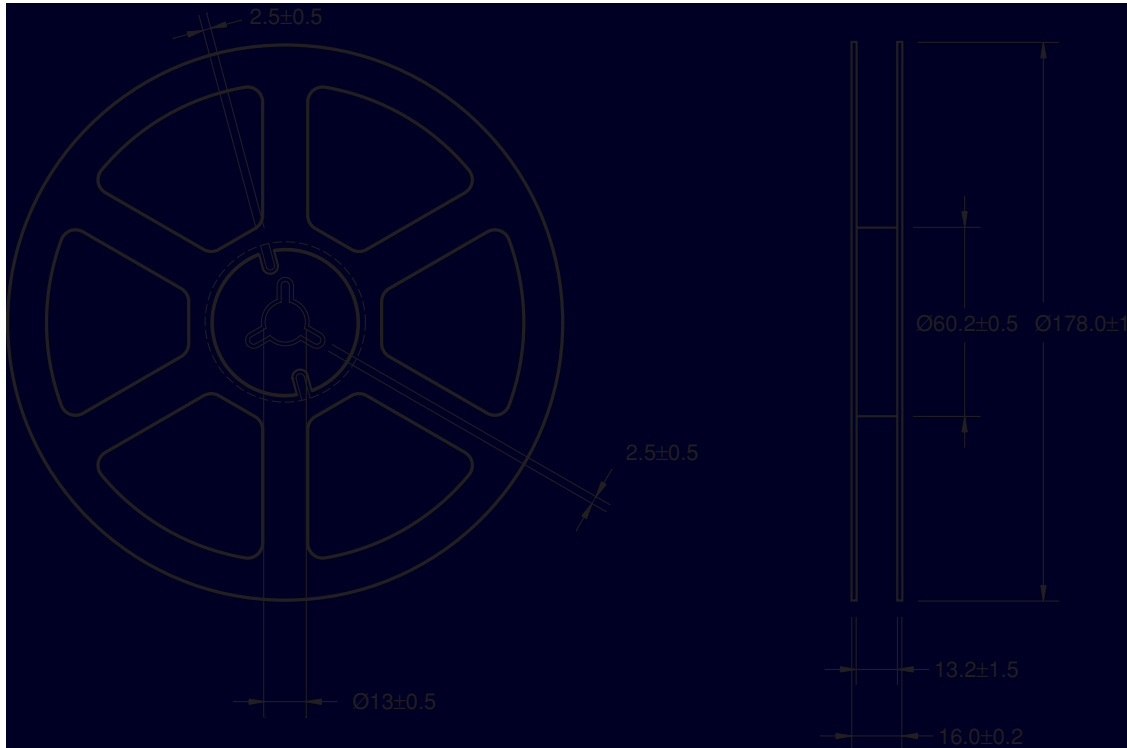
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# **SURFACE MOUNT LED LAMP**

## **STANDARD BRIGHT 1206**

### **(Reverse Mount with Inner Lens)**

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