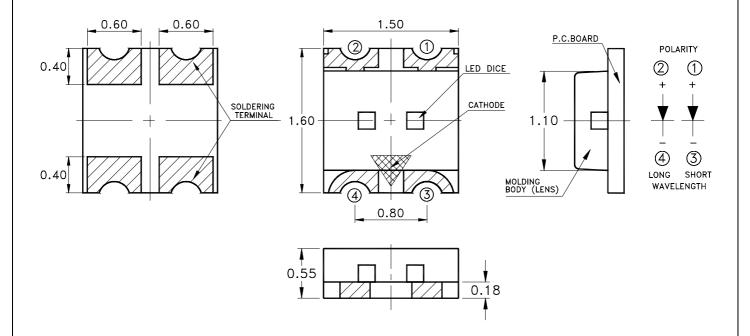


### Property of Lite-On Only

#### **Features**

- \* Dual color chip LED.
- \* Ultra bright AlInGaP Chip LED.
- \* Package in 8mm tape on 7" diameter reels.
- \* Compatible with automatic placement equipment.
- \* Compatible with infrared and vapor phase reflow solder process.
- \* EIA STD package.
- \* I.C. compatible.

### Package Dimensions



#### **Devices**

Part No.	Lens	Source Color
LTST-C195KGJRKT	Water Clear	AlInGaP Green
	Water Clear	AlInGaP Red

#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.1$ mm (.004") unless otherwise noted.

Part No.: LTST-C195KGJRKT Page: 1 of 6

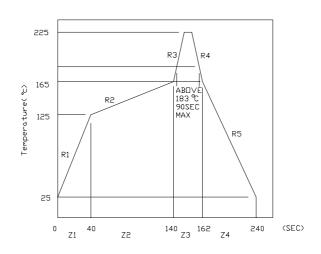


### Property of Lite-On Only

### **Absolute Maximum Ratings At Ta=25°C**

Parameter	LTST-C195KGJRKT		Unit	
	Green	Red		
Power Dissipation	75	75	mW	
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	80	mA	
Continuous Forward Current	30	30	mA	
Derating Linear From 25°C	0.4	0.4	mA/°C	
Reverse Voltage	5	5	V	
Operating Temperature Range	-55°C to + 85°C			
Storage Temperature Range	-55°C to + 85°C			
Wave Soldering Condition	260°C For 5 Seconds			
Infrared Soldering Condition	260°C For 5 Seconds			
Vapor Phase Soldering Condition	215°C For 3 Minutes			

### Suggest IR Reflow Condition:



Part No.: LTST-C195KGJRKT Page: 2 of 6



### Property of Lite-On Only

### Electrical / Optical Characteristics At Ta=25°C

Parameter	Symbol		LTST-C195KGJRKT		Unit	Test Condition	
	Symbol		Green	Red	Unit	Test Condition	
Luminous Intensity	IV	MIN.	20.0	15.0	mcd	IF = 20mA Note 1	
		TYP.	35.0	25.0			
		MAX.				1,000 1	
Viewing Angle	201/2	TYP.	130	130	deg	Note 2 (Fig.6)	
Peak Emission Wavelength	λΡ	TYP.	574	639	nm	Measurement @Peak (Fig.1)	
Dominant Wavelength	λd	TYP.	571	631	nm	Note 3	
Spectral Line Half-Width	Δλ	TYP.	15	20	nm		
Forward	VF	TYP.	2.0	2.0	V	IF = 20mA	
Voltage	VF	MAX.	2.4	2.4	V		
Reverse Current	IR	MAX.	100	100	μΑ	VR = 5V	
Capacitance	С	TYP.	40	40	PF	VF=0, f=1MHZ	

Notes: 1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

- 2.  $\theta$ 1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3. The dominant wavelength,  $\lambda d$  is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

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### Property of Lite-On Only

### **Typical Electrical / Optical Characteristics Curves**

(25°C Ambient Temperature Unless Otherwise Noted)

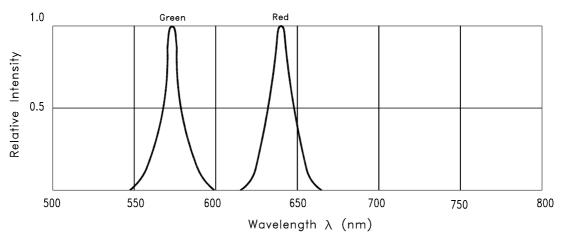


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

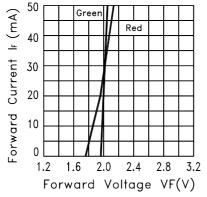


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

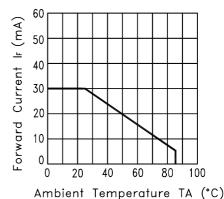


Fig.3 FORWARD CURRENT
DERATING CURVE

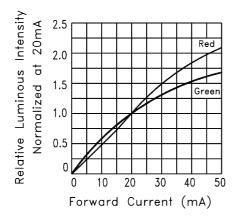


Fig.4 RELATIVE LUMINOUS
INTENSITY VS. FORWARD CURRENT

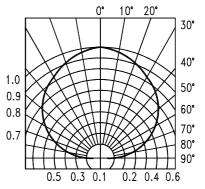


Fig.6 SPATIAL DISTRIBUTION

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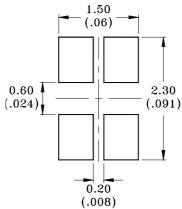


### Property of Lite-On Only

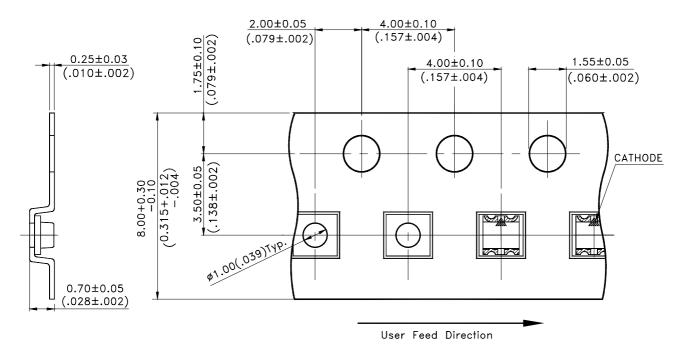
### Cleaning

Do not use unspecified chemical liquid to clean LED they could harm the package. If clean is necessary, immerse the LED in ethyl alcohol or in isopropyl alcohol at normal temperature for less one minute.

### **Suggest Soldering Pad Dimensions**



### **Package Dimensions Of Tape And Reel**



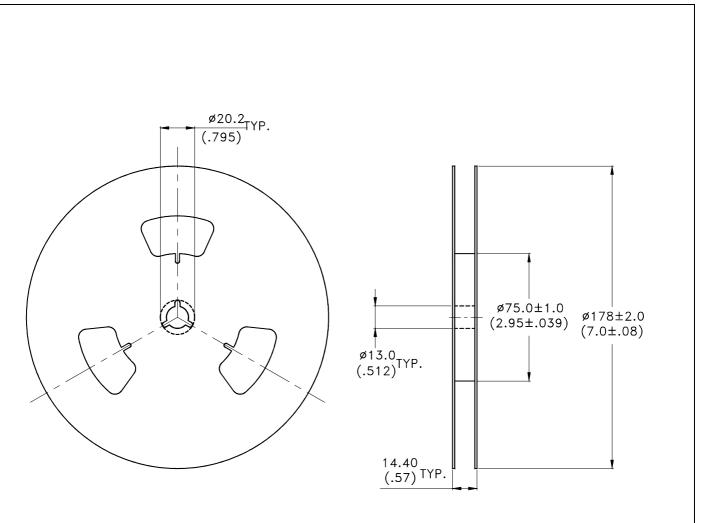
### Notes:

1. All dimensions are in millimeters (inches).

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### Property of Lite-On Only



#### Notes:

- 1. Empty component pockets sealed with top cover tape.
- 2. 7 inch reel-4000 pieces per reel.
- 3. The maximum number of consecutive missing lamps is two.
- 4. In accordance with ANSI/EIA 481-1-A-1994 specifications.

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