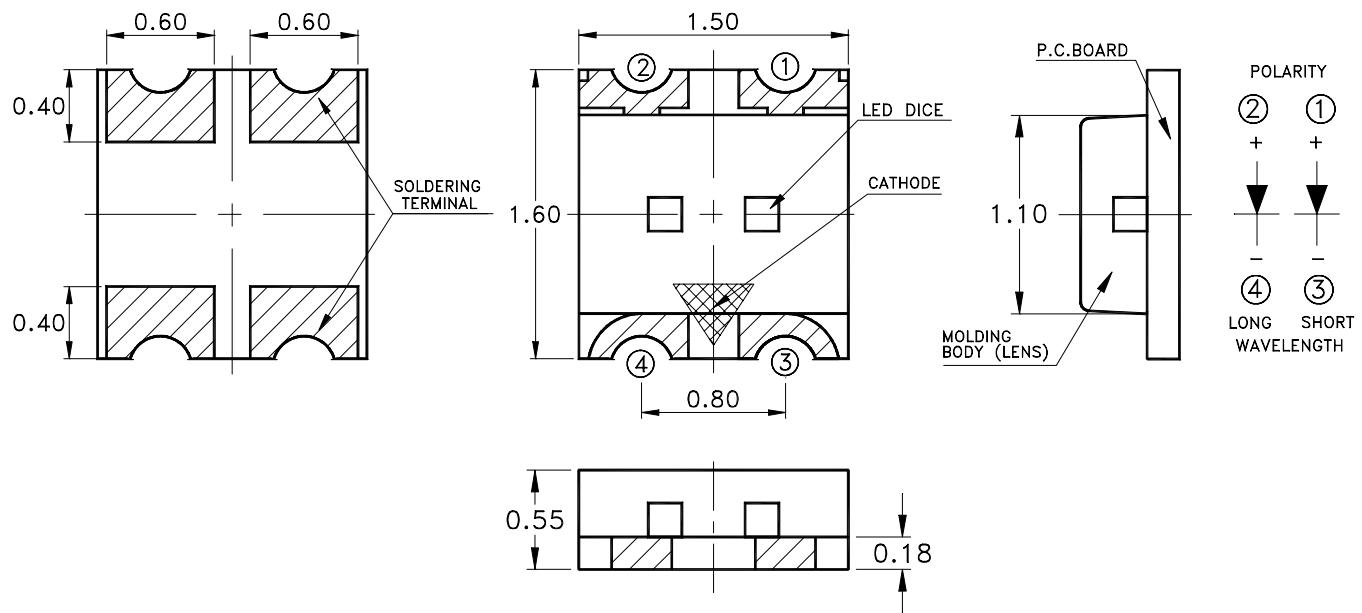


**Features**

- \* Dual color 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-C195GAKT	Water Clear	GaP on GaP Green
	Water Clear	GaAsP on GaP Orange

**Notes:**

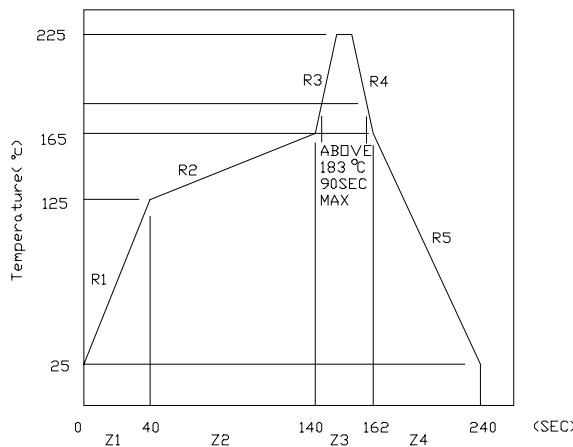
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1\text{mm}$  (.004") unless otherwise noted.

## Property of Lite-On Only

Absolute Maximum Ratings At  $T_a=25^\circ\text{C}$ 

Parameter	LTST-C195GAKT		Unit
	Green	Orange	
Power Dissipation	100	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	120	120	mA
Continuous Forward Current	30	30	mA
Derating Linear From $50^\circ\text{C}$	0.6	0.6	mA/ $^\circ\text{C}$
Reverse Voltage	5	5	V
Operating Temperature Range	$-55^\circ\text{C}$ to $+85^\circ\text{C}$		
Storage Temperature Range	$-55^\circ\text{C}$ to $+85^\circ\text{C}$		
Wave Soldering Condition	$260^\circ\text{C}$ For 5 Seconds		
Infrared Soldering Condition	$260^\circ\text{C}$ For 5 Seconds		
Vapor Phase Soldering Condition	$215^\circ\text{C}$ For 3 Minutes		

Suggest IR Reflow Condition :





LITE-ON ELECTRONICS, INC.

Property of Lite-On Only

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

Parameter	Symbol		LTST-C195GAKT		Unit	Test Condition
			Green	Orange		
Luminous Intensity	IV	MIN.	5.0	2.0	mcd	IF = 20mA Note 1
		TYP.	10.0	4.5		
		MAX.				
Viewing Angle	2θ1/2	TYP.	130	130	deg	Note 2 (Fig.6)
Peak Emission Wavelength	λP	TYP.	565	610	nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	TYP.	569	602	nm	Note 3
Spectral Line Half-Width	Δλ	TYP.	30	35	nm	
Forward Voltage	VF	TYP.	2.1	2.1	V	IF = 20mA
		MAX.	2.6	2.6		
Reverse Current	IR	MAX.	100	100	μA	VR = 5V
Capacitance	C	TYP.	35	15	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. θ1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

3. The dominant wavelength, λd is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

### Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

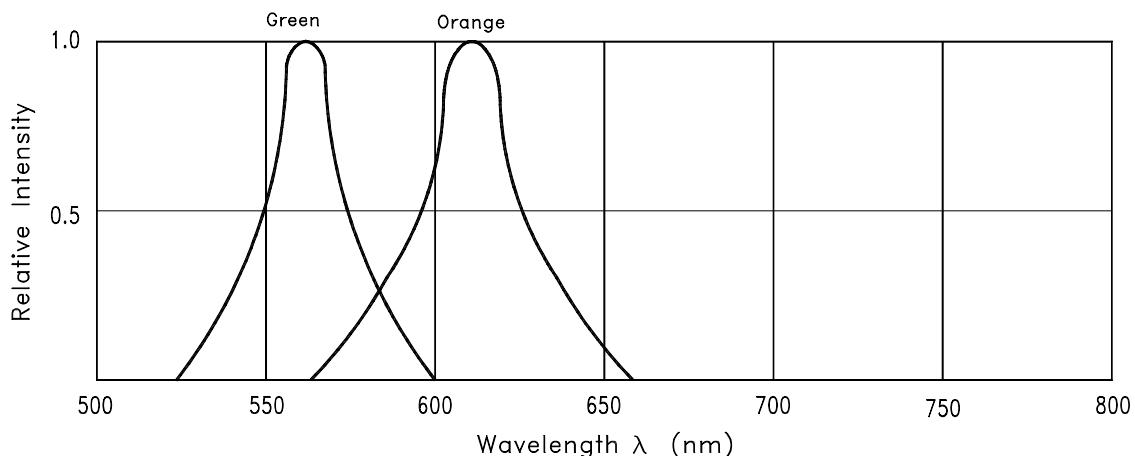


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

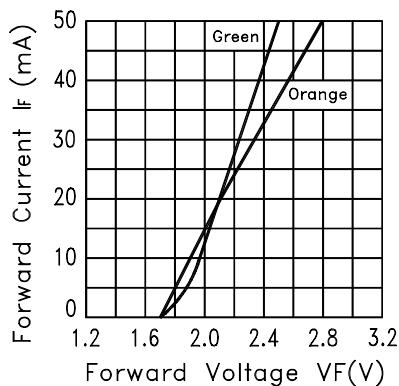


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

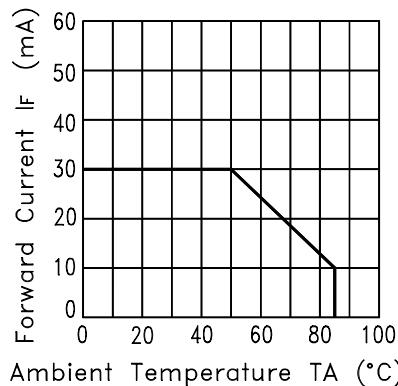


Fig.3 FORWARD CURRENT DERATING CURVE

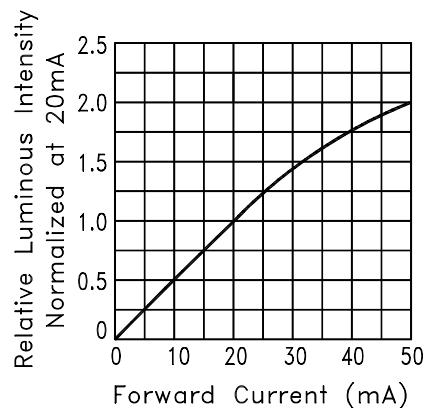


Fig.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

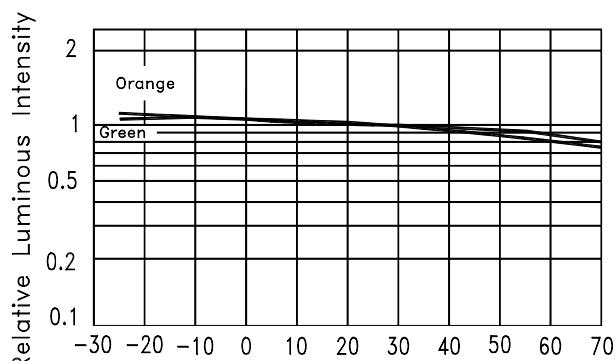


Fig.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

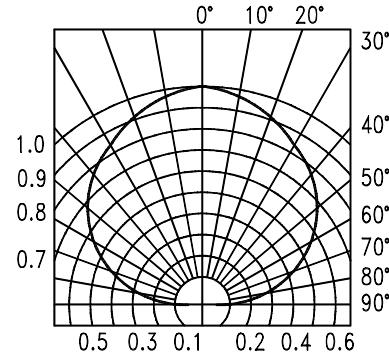
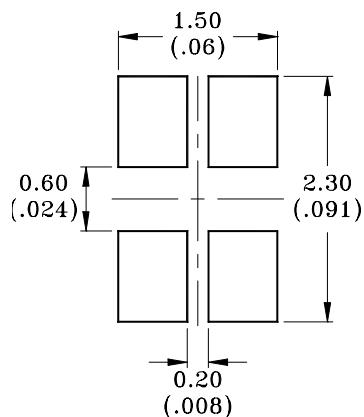
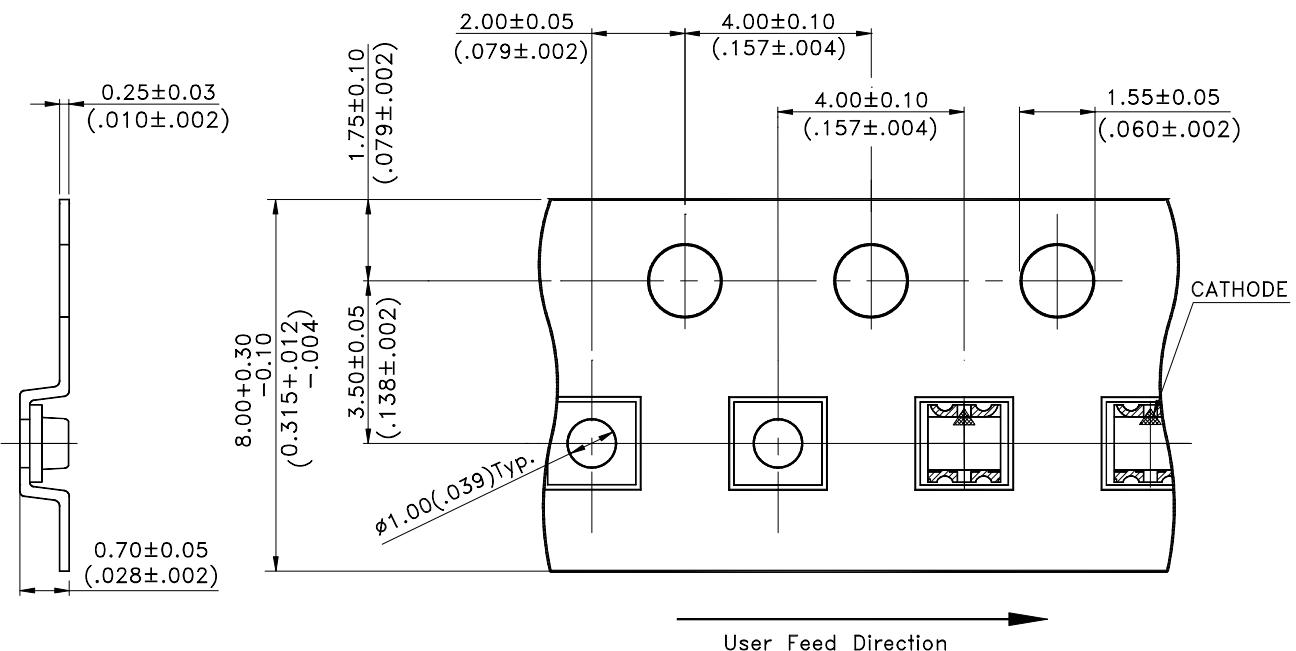


Fig.6 SPATIAL DISTRIBUTION

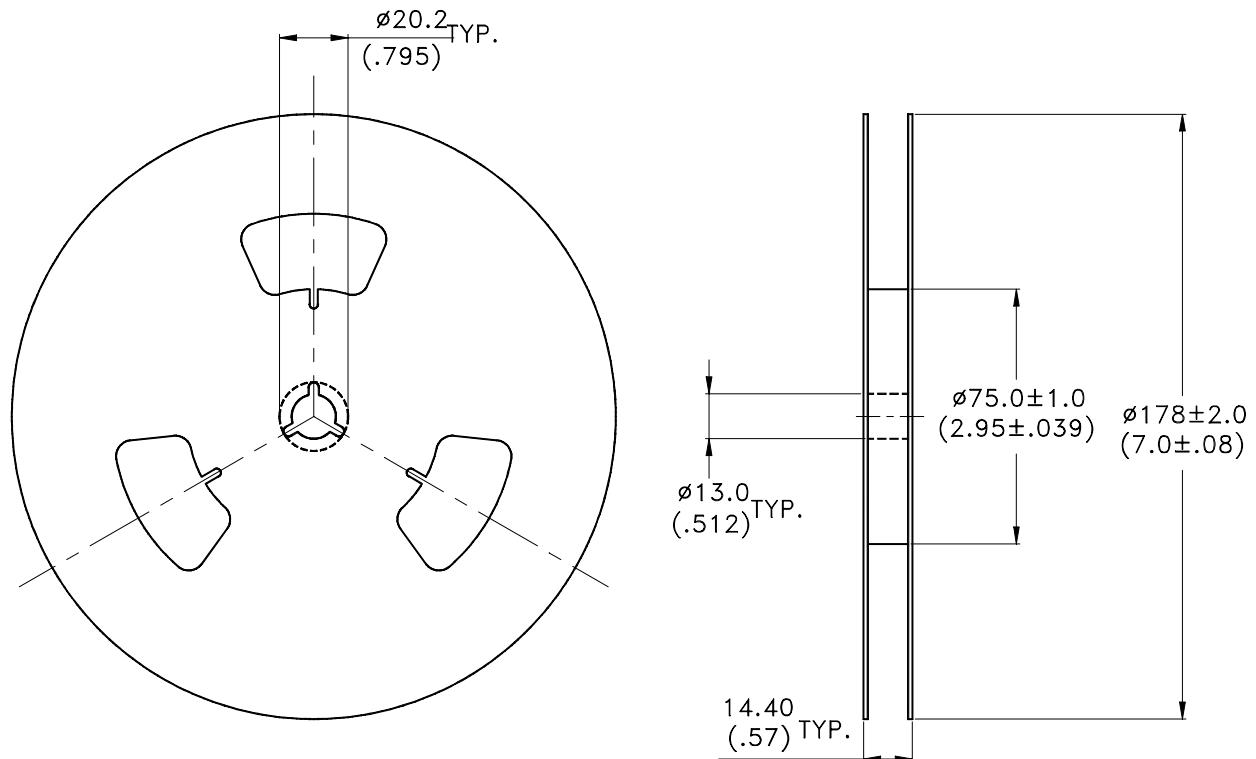
**Property of Lite-On Only****Cleaning**

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).

**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.