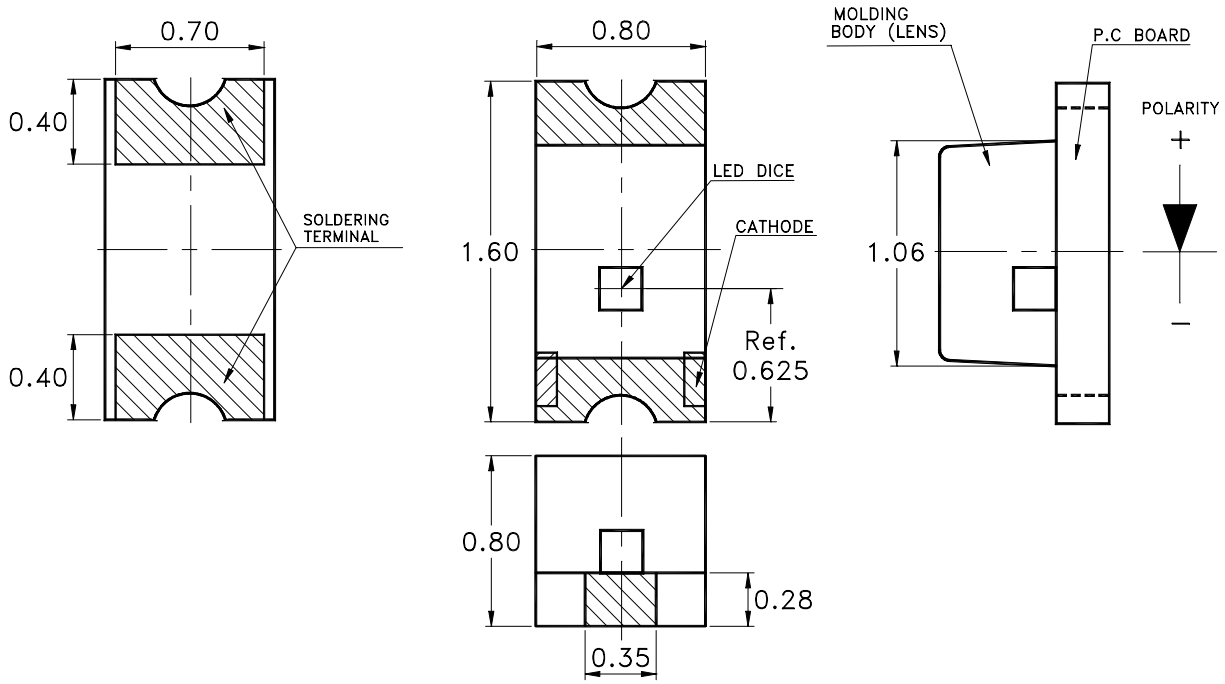
Features

* 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



Part No.	Lens	Source Color
LTST-C190KFKT	Water Clear	AlInGaP Orange

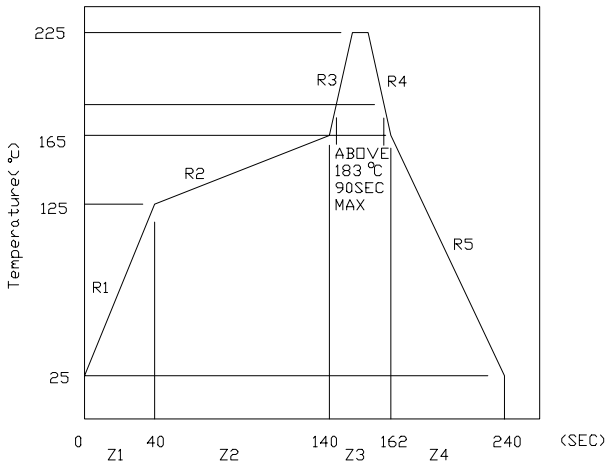
Notes:

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

Absolute Maximum Ratings At Ta= 25℃

Parameter	LTST-C190KFKT	Unit
Power Dissipation	75	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Continuous Forward Current	30	mA
Derating Linear From 25℃	0.4	mA/℃
Reverse Voltage	5	V
Operating Temperature Range	-55℃ to + 85℃	
Storage Temperature Range	-55℃ to + 85℃	
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 :



Electrical Optical Characteristics At Ta= 25℃

Parameter	Symbol	Part No. LTST-	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	IV	C190KFKT	30.0	60.0		mcd	IF = 20mA Note 1
Viewing Angle	$2\theta 1/2$	C190KFKT		130		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λP	C190KFKT		611		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd	C190KFKT		605		nm	Note 3
Spectral Line Half-Width	$\Delta \lambda$	C190KFKT		17		nm	
Forward Voltage	VF	C190KFKT		2.0	2.4	V	IF = 20mA
Reverse Current	IR	C190KFKT			100	μA	VR = 5V
Capacitance	C	C190KFKT		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, 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)

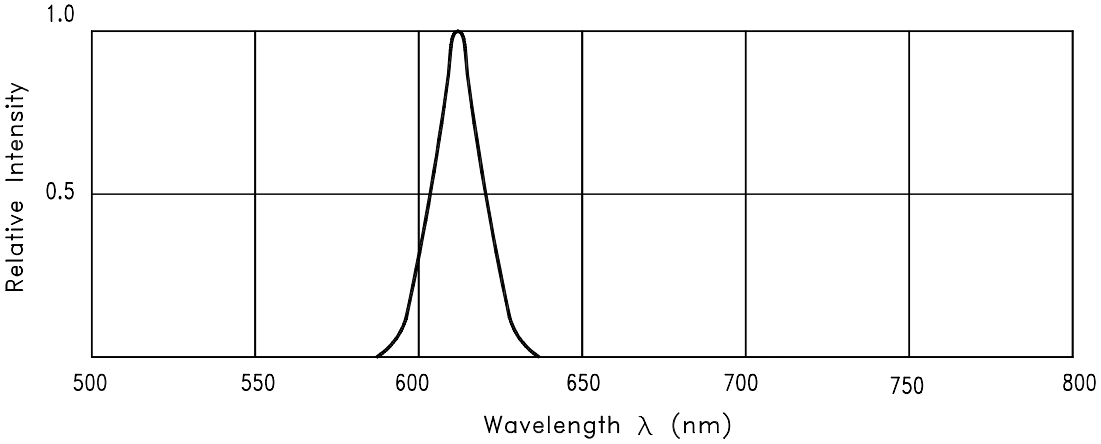


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

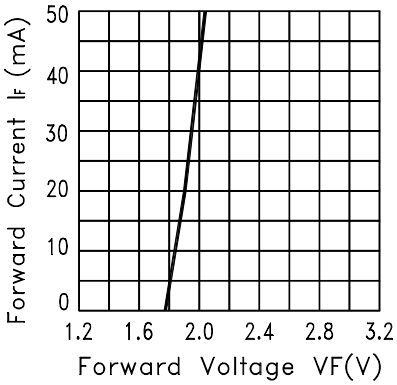


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

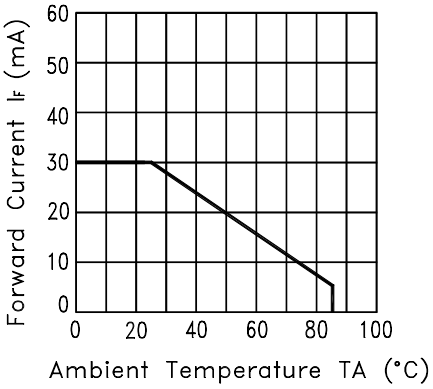


Fig.3 FORWARD CURRENT DERATING CURVE

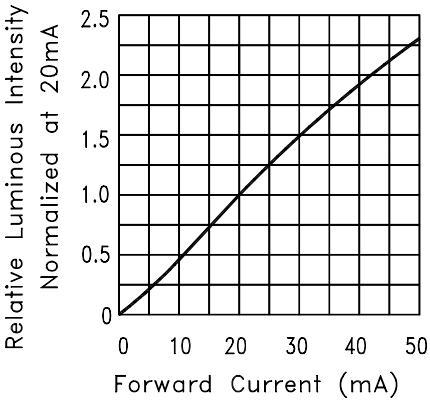


Fig.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

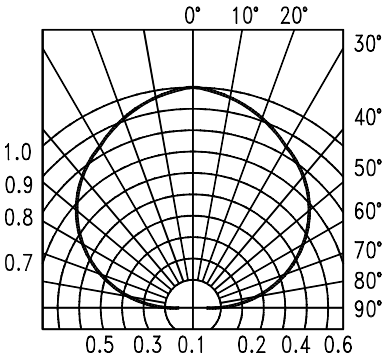
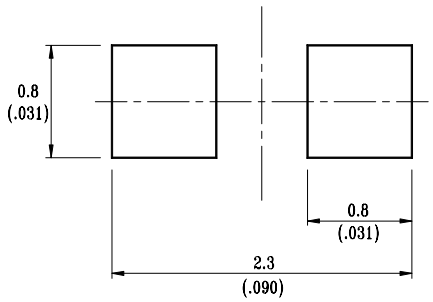


Fig.6 SPATIAL DISTRIBUTION

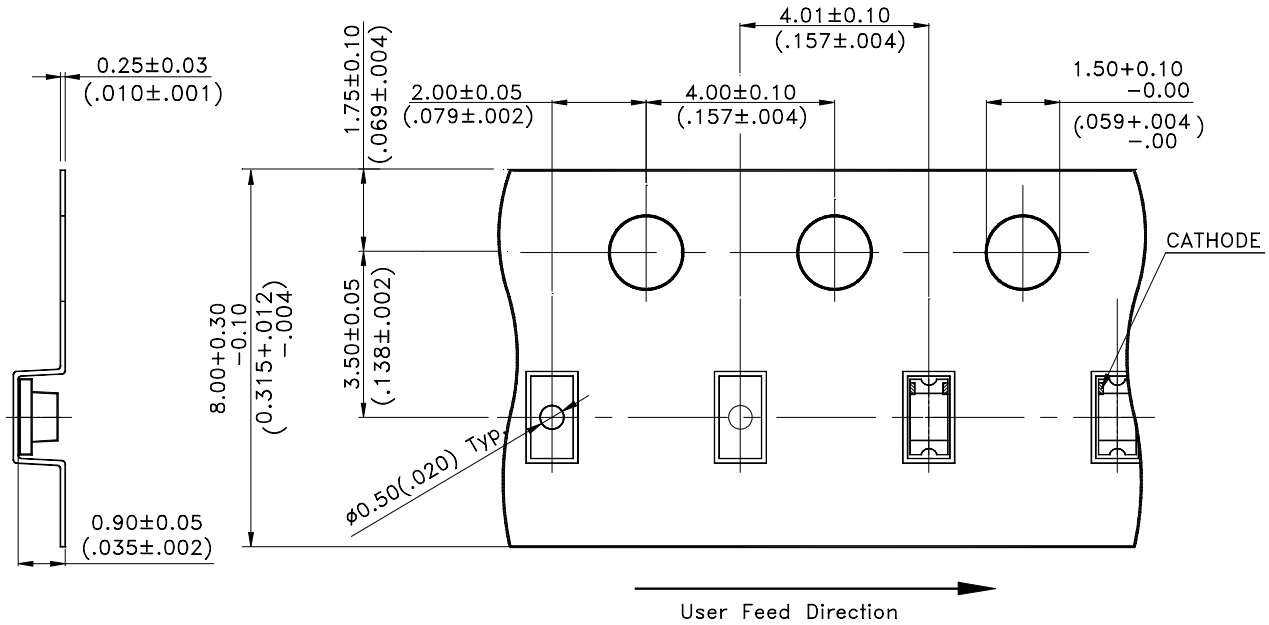
Cleaning

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

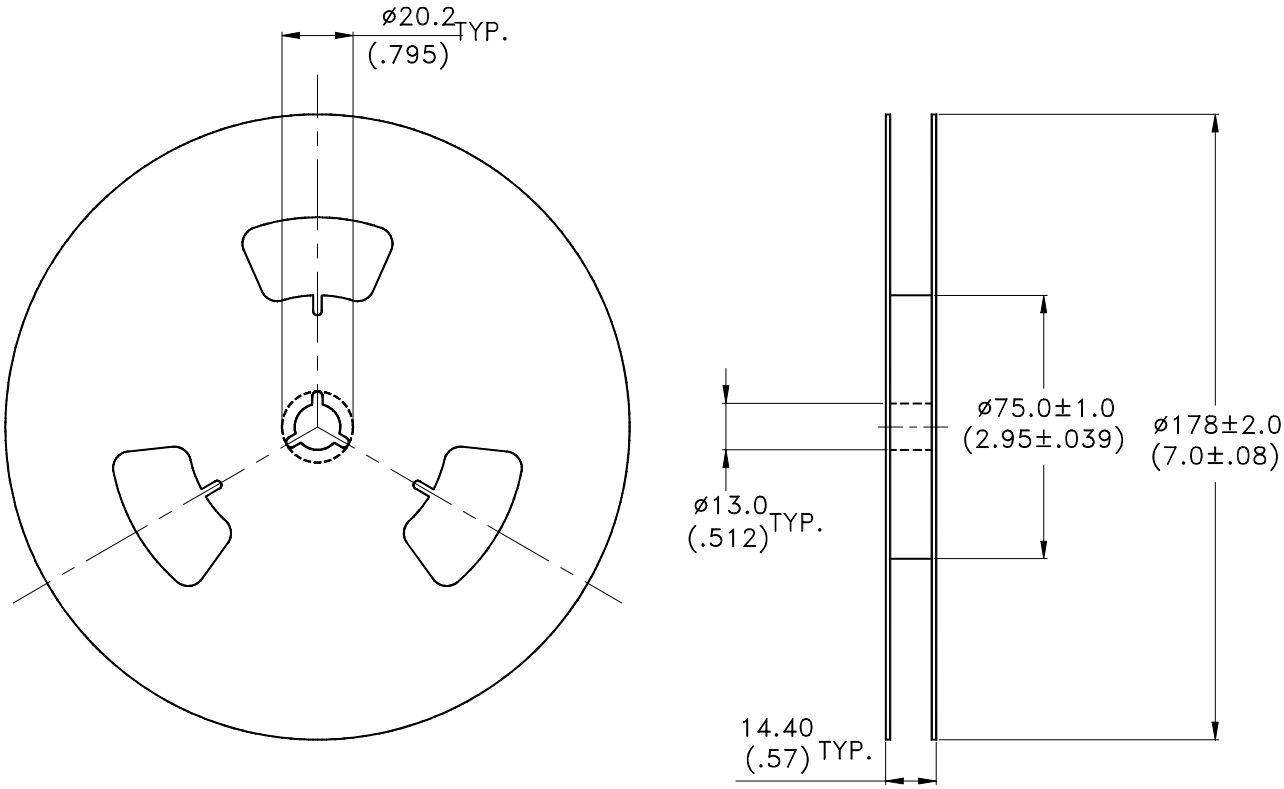


Package Dimensions Of Tape And Reel



Notes:

1. All dimensions are in millimeters (inches).



Notes:

1. Empty component pockets sealed with top cover tape.
2. 7 inch reel-3000 pieces per reel.
3. The maximum number of consecutive missing lamps is two.
4. In accordance with ANSI/EIA 481-1-A-1994 specifications.