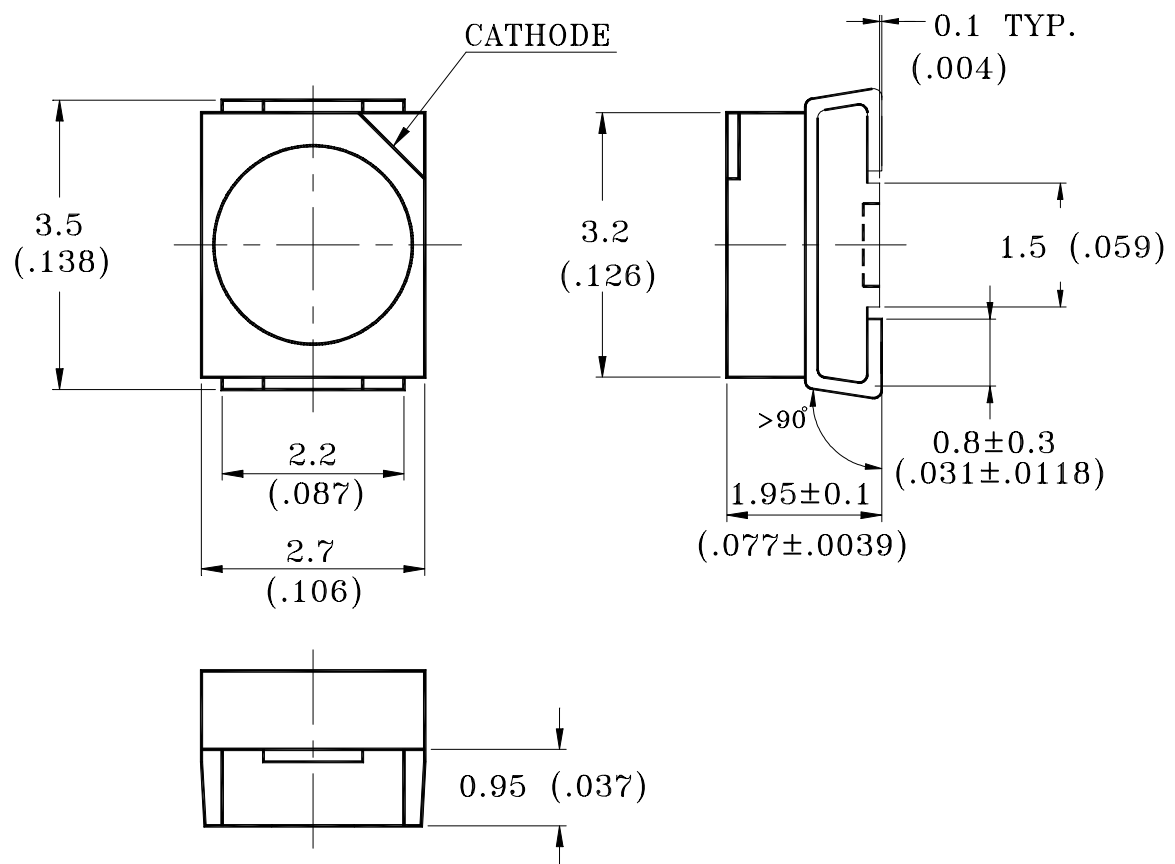


Property of Lite-On Only

Features

- * 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 Color	Source Color
LTST-T670TBKT	Water Clear	GaN Blue

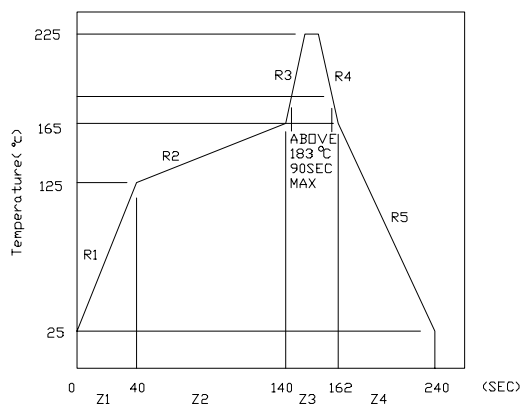
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2 mm (.008") unless otherwise noted.

Absolute Maximum Ratings at Ta=25°C

Parameter	LTST-T670TBKT	Unit
Power Dissipation	120	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	30	mA
Derating Linear From 25°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-55°C to + 100°C	
Storage Temperature Range	-55°C to + 100°C	
Infrared Soldering Condition	260°C For 5 Seconds	
Vapor Phase Soldering Condition	215°C For 3 Minutes	
Wave Soldering Temperature	260°C For 5 Seconds	

Suggest IR Reflow Condition :



Electrical / Optical Characteristics at Ta=25°C

Parameter	Symbol	Part No. LTST-	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	IV	T670TBKT	-	90.0		mcd	IF = 20mA Note 1
Viewing Angle	2θ _{1/2}	T670TBKT		120		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λ _P	T670TBKT		468		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λ _d	T670TBKT		470		nm	Note 3
Spectral Line Half-Width	Δλ	T670TBKT		25		nm	
Forward Voltage	V _F	T670TBKT		3.5	4.0	V	IF = 20mA
Reverse Current	I _R	T670TBKT			100	μ A	V _R = 5V
Capacitance	C	T670TBKT		40		PF	V _F =0, f=1MHZ

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

2. θ 1/2 is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

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

4. Caution in ESD:

Static Electricity and surge damages the LED. It is recommend to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

Typical Electrical / Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

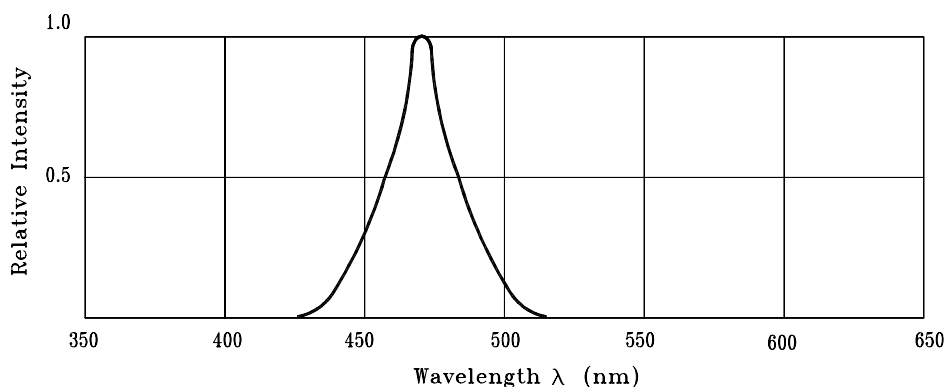


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

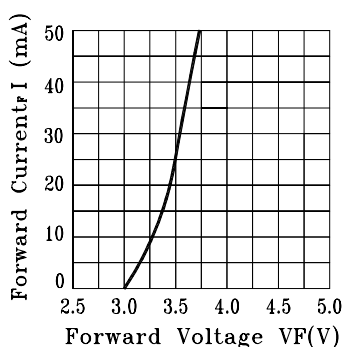


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

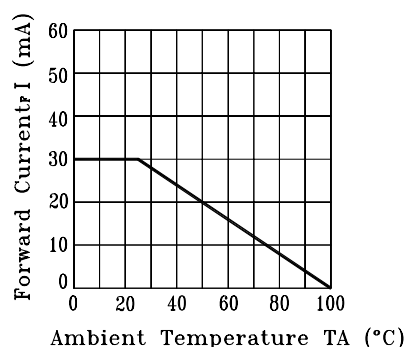


Fig.3 FORWARD CURRENT DERATING CURVE

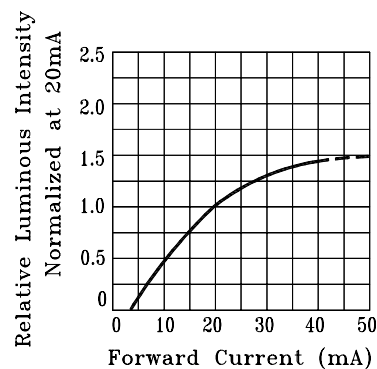


Fig.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

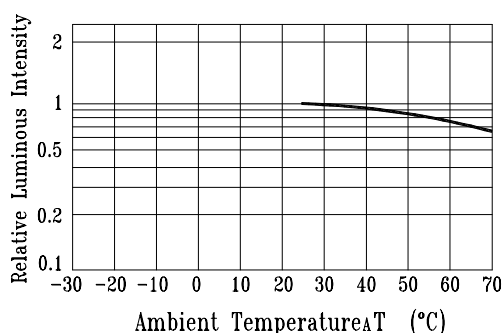


Fig.5 Luminous Intensity vs. Ambient Temperature

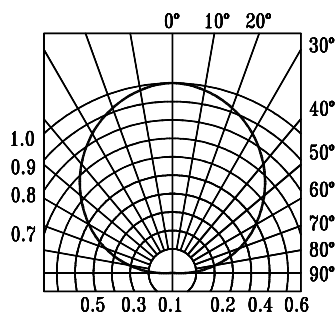


Fig.6 SPATIAL DISTRIBUTION

User Guide

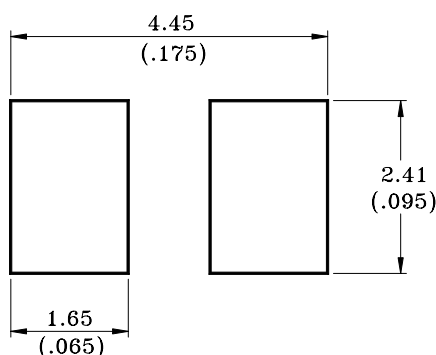
Cleaning

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

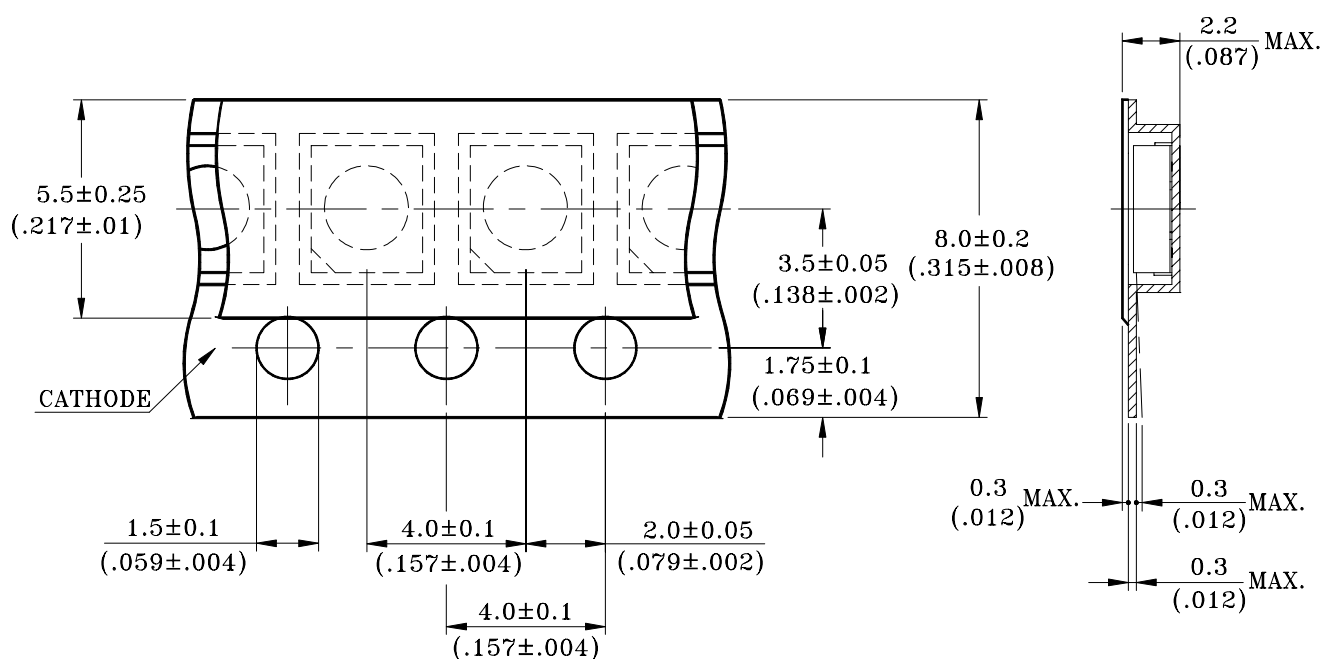
Recommend Printed Circuit Board Attachment Pad

Infrared / vapor phase

Reflow Soldering



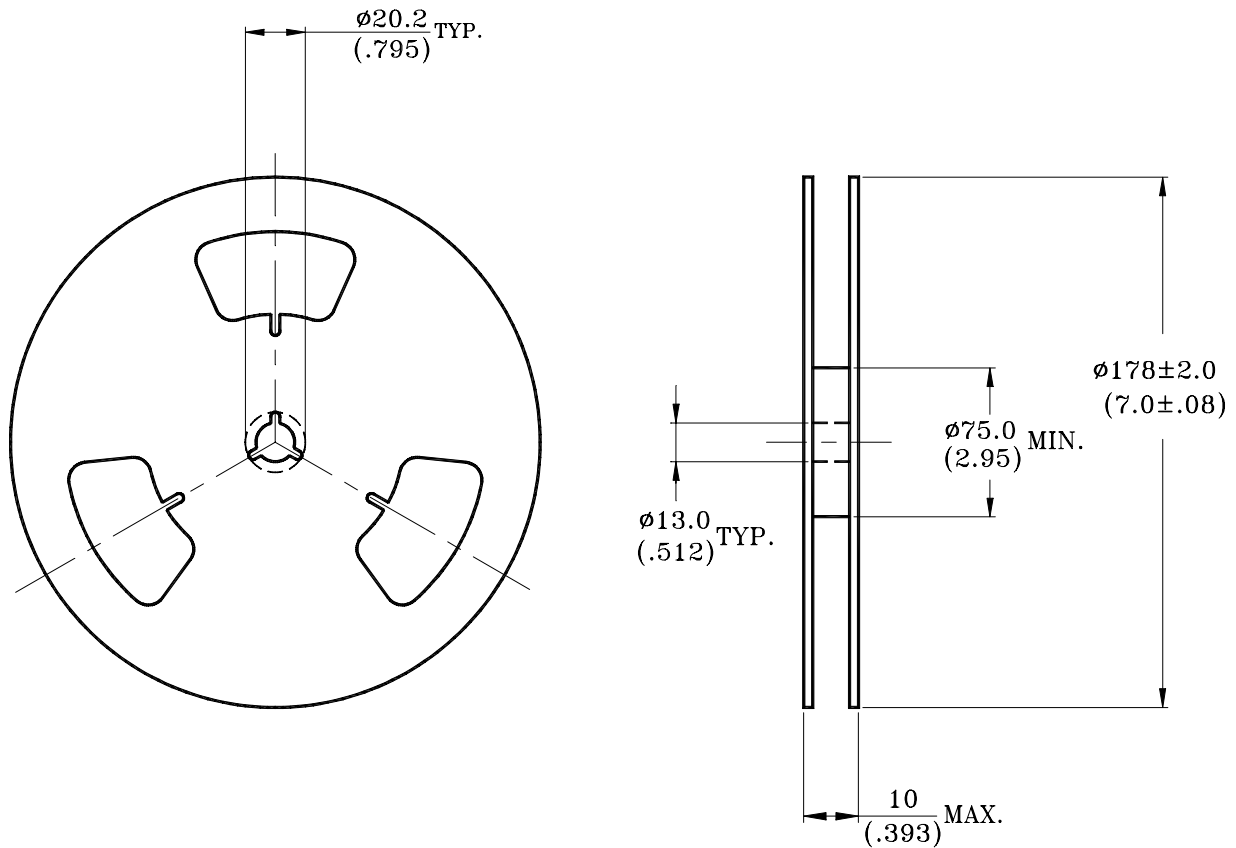
Package Dimensions of Tape



Note:

1.All dimensions are in millimeters (inches).

Package Dimensions of Reel



Notes:

1. Empty component pockets sealed with top cover tape.
2. 7 inch reel-2000 pieces per reel.
3. The maximum number of consecutive missing lamps is two.
4. In accordance with ANSI/EIA RS-481 specifications.