

# LT9550ED

$\phi$  7.5mm Cylinder Type  
Dichromatic LED Lamps

## Model No.

LT9550ED Yellow-green  
Red

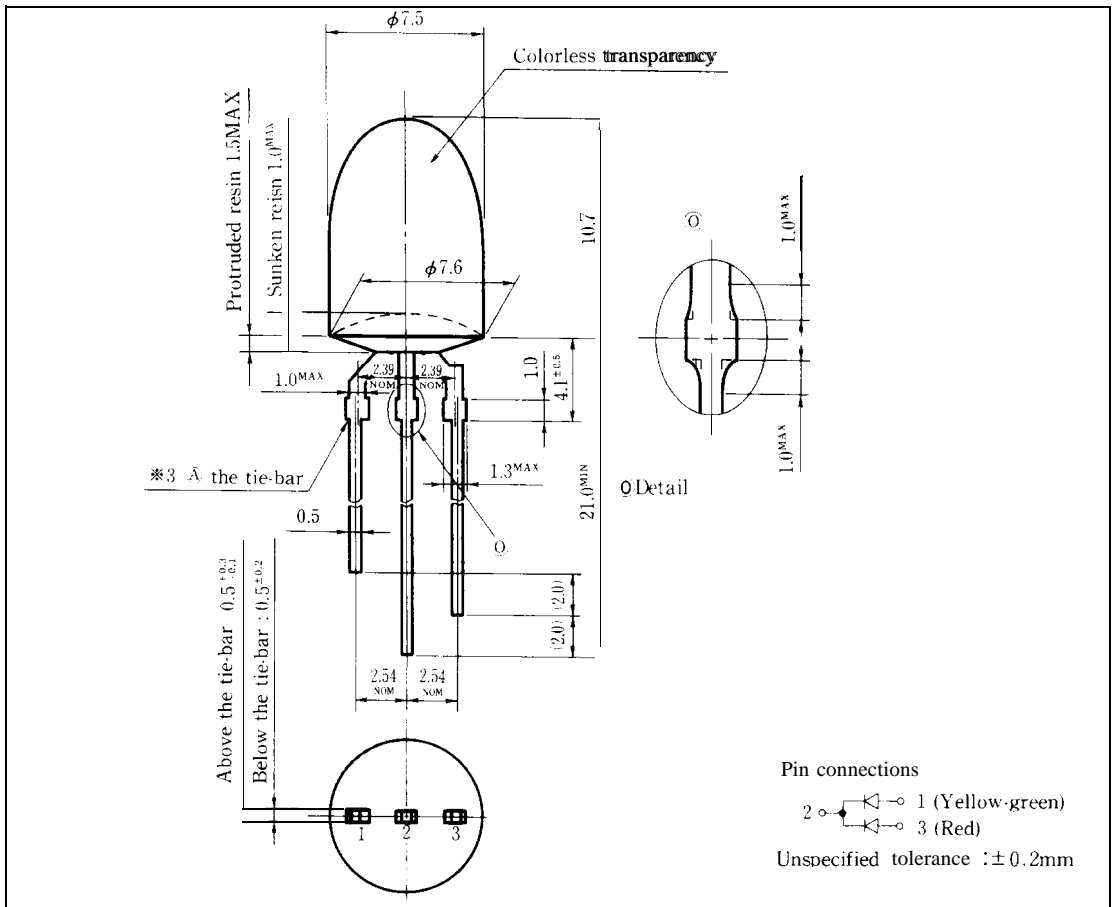
GaP  
GaAsP/GaP

## Features

1.  $\phi$  7.5mm all resin mold
2. Radiation color : Red, yellow-green and orange (mixed color)
3. High-density mounting (flangeless package)
4. Colorless transparency lens type

## Outline Dimensions

(Unit: mm)



SHARP

## LT9550ED

## ■ Absolute Maximum Ratings

(Ta=25°C)

Parameter	Symbol	LT9550ED				Unit
		Yellow-green	Red			
*1 Power dissipation	P	84	84			mW
Continuous forward current	I <sub>F</sub>	30	30			mA
*2 Peak forward current	I <sub>FM</sub>	50	50			mA
Derating factor	DC	—	0.40	0.40		mA/°C
	Pulse	—	0.67	0.67		mA/°C
Reverse voltage	V <sub>R</sub>	5				V
Operating temperature	T <sub>opr</sub>	-25 to +85				°C
Storage temperature	T <sub>stg</sub>	-25 to +100				°C
*3 Soldering temperature	T <sub>sol</sub>	260(within 5 seconds)				°C

\*1 The value of power dissipation is specified under the condition that either yellow-green or red is lightened separately. When the both diodes of yellow-green and red are lightened simultaneously, the power dissipation of each diode should be less than the half of the value specified in this table.

\*2 Duty ratio = 1/10 , Pulse width = 0.1ms

\*3 At the (A) position of above outline dimensions

3

LT9550ED (Yellow-green/Red)

■ Electro-optical Characteristics

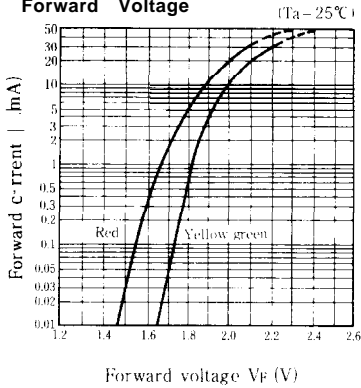
(Ta = 25°C)

Parameter	Symbol	Radiation color	Conditions	MIX.	TYP.	MAX.	Unit
Forward voltage	V <sub>F</sub>	Yellow-green	I <sub>F</sub> = 20mA		2.1	2.8	V
		Red	I <sub>F</sub> = 20mA		2.0	2.8	
*4 Luminous intensity	I <sub>v</sub>	Yellow-green	I <sub>F</sub> = 20mA	80	120	—	mcd
		Red	I <sub>F</sub> = 20mA	<b>70</b>	<b>160</b>	—	
Peak emission wavelength	λ <sub>p</sub>	Yellow-green	I <sub>F</sub> = 20mA		565	—	'm
		Red	I <sub>F</sub> = 20mA		—	635	
Spectrum radiation bandwidth	Δλ	Yellow-green	I <sub>F</sub> = 20mA		<b>30</b>	—	'm
		Red	I <sub>F</sub> = 20mA		35	—	
Reverse current	I <sub>R</sub>	Yellow-green	V <sub>R</sub> = 4V		—	10	μA
		Red	V <sub>R</sub> = 4V		—	10	
Terminal capacitance	C <sub>t</sub>	Yellow-green	V = 0V f = 1MHz	—	35	—	pF
		Red	V = 0V f = 1MHz	—	20	—	
Response frequency	f <sub>c</sub>	Yellow-green	—	—	4	—	MHz
		Red	—	—	—	4	

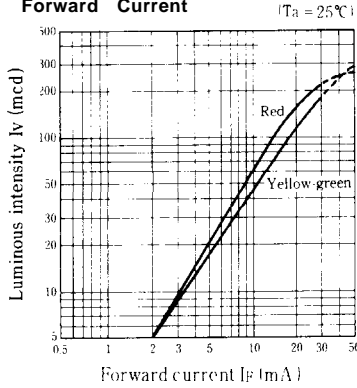
X4 Tolerance: ±30%

■ Characteristics Diagrams

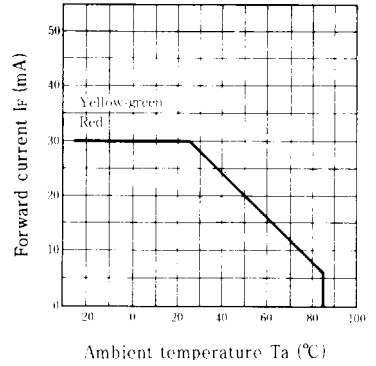
Forward Current vs. Forward Voltage



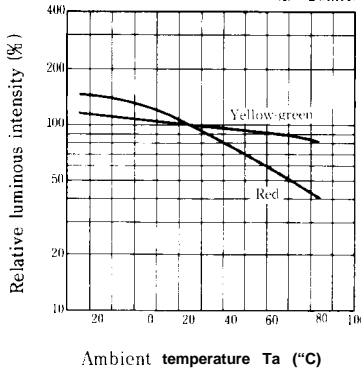
Luminous Intensity vs. Forward Current



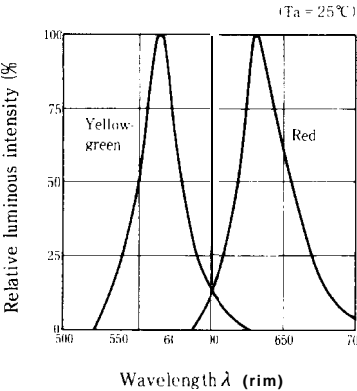
Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature



Spectrum Distribution



Radiation Diagram

