

# LT9555CU

## ■ Model No.

LT9555CU Yellow-green                            GaP  
Red (Super-luminosity) GaAlAs/GaAlAs

## ø7.5mm Cylinder Type Common Anode Dichromatic LED Lamps

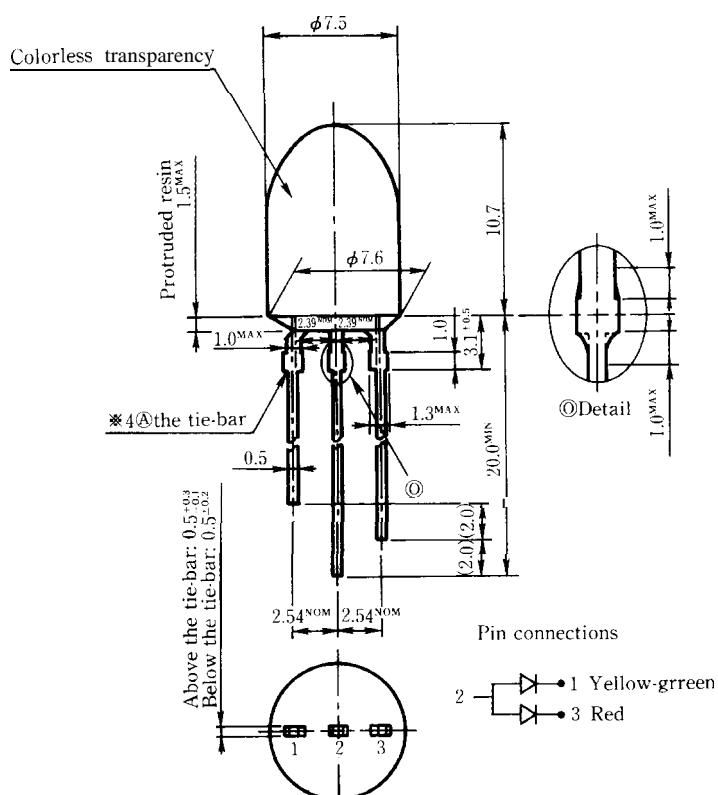
## ■ Features

1. 47.5mm all resin mold
2. Common anode
3. Radiation color : Red, yellow-green and orange (mixed color)
4. High-density mounting (flangeless package)
5. Colorless transparency lens type
6. Wide viewing angle

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## ■ Outline Dimensions

(Unit mm)

Unspecified tolerance  $\pm 0.2\text{mm}$ **SHARP**

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## LT9555CU

## ■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter	Symbol	LT9555CU		Unit
		Yellow-green	Red	
*1 Power dissipation	P	140	75	mW
*2 Continuous forward current	I <sub>F</sub>	50	30	mA
*3 Peak forward current	I <sub>FM</sub>	100	50	mA
Derating factor	DC	—	0.67	mA/°C
	Pulse	—	1.35	mA/°C
Reverse voltage	V <sub>R</sub>	5	4	v
Operating temperature	T <sub>opr</sub>	-30 to +85		°C
Storage temperature	T <sub>stg</sub>	-30 to +100		°C
*4 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 Yellow-green : When lighting continuously, If shall be 30mA or less

\*3 Duty ratio=1/10, Pulse width =0.1ms

\*4 At the  $\textcircled{A}$  position of outline dimensions

## LT9555CU (Yellow-green/Red)

## ■ Electro-optical Characteristics

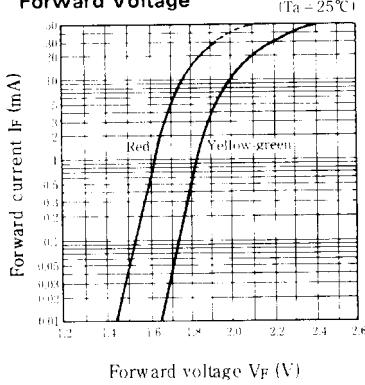
(Ta = 25°C)

Parameter	Symbol	Radiation color	Conditions	MIN.	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	—	1.85	2.5	
*5 Luminous intensity	I <sub>V</sub>	Yellow-green	I <sub>F</sub> = 20mA	40	100	—	mcd
		Red	I <sub>F</sub> = 20mA	125	300	—	
Peak emission wavelength	$\lambda_p$	Yellow	I <sub>F</sub> = 20mA	—	565	—	nm
		Red	I <sub>F</sub> = 20mA	—	660	—	
Spectrum radiation bandwidth	$\Delta\lambda$	Yellow-green	I <sub>F</sub> = 20mA	—	30	—	'm
		Red	I <sub>F</sub> = 20mA	—	20	—	
Reverse current	I <sub>R</sub>	Yellow-green	V <sub>R</sub> = 4V	—	10	—	$\mu A$
		Red	V <sub>R</sub> = 3V	—	100	—	
Terminal capacitance	C <sub>t</sub>	Yellow-green	V = 0V f = 1MHz	—	35	—	pF
		Red	V = -0.5V f = 1MHz	—	25	—	
Response frequency	f <sub>c</sub>	Yellow-green	—	—	4	—	MHz
		Red	—	—	—	—	

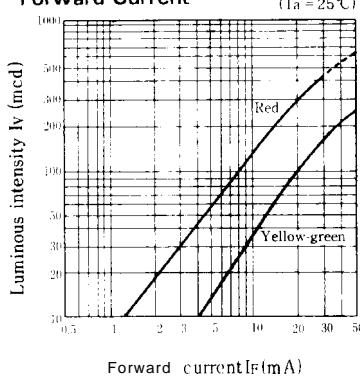
\*5 Tolerance:  $\pm 30\%$ 

## ■ Characteristics Diagrams

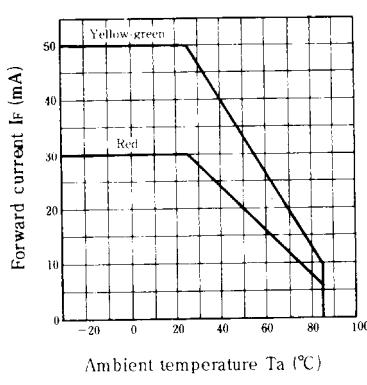
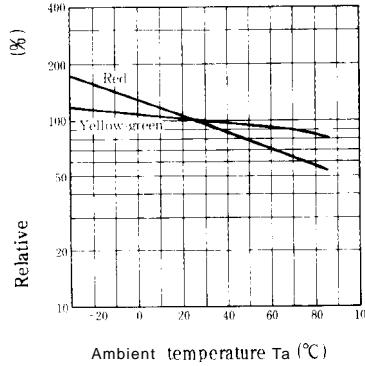
Forward Current vs. Forward Voltage



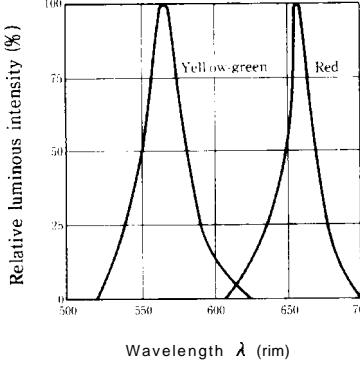
Luminous Intensity vs. Forward Current



Forward Current Derating Curve

Relative Luminous Intensity vs. Ambient Temperature (I<sub>F</sub> = 20mA)

Spectrum Distribution



Radiation Diagram

