

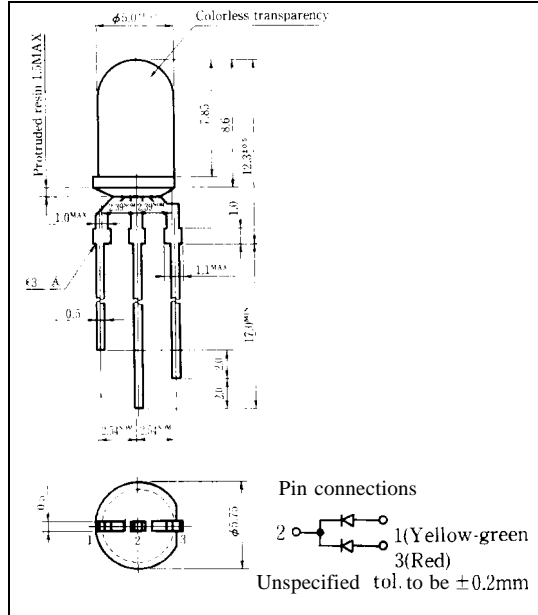
# GL5ED44

## φ 5mm(T-1 3/4) Cylinder Type Dichromatic LED Lamps

Model No.  
GL5ED44 Yellow -green  
Red

GaP  
GaAsP/GaP

### Outline Dimensions (Unit: mm)



### Features

1. φ5mm(T-1 3/4) all resin mold
2. Radiation color : Red, yellow-green and orange (mixed color)
3. Colorless transparency lens type

### Absolute Maximum Ratings

(Ta = 25°C)

Parameter	Symbol	GL5ED44		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	m A/°C
	Pulse	—	0.67	m A/°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

GL5ED44 (Yellow-green/Red)

■ Electro-optical Characteristics

(Ta = 25°C)

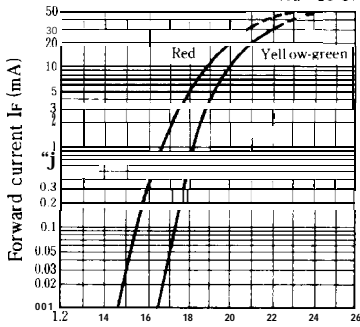
Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V <sub>F</sub>	Yellow-green	I <sub>F</sub> = 20mA		2.1	2.8	V
		Red	I <sub>F</sub> = 20mA	—	2.0	2.8	
※4 Luminous intensity	I <sub>v</sub>	Yellow-green	I <sub>F</sub> = 20mA	<b>30</b>	<b>80</b>	—	'cd
		Red	I <sub>F</sub> = 20mA	<b>20</b>	<b>50</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 = 1 MHz	—	35	—	pF
		Red	V = 0V f = 1 MHz	—	20	—	
Response frequency	f	Yellow-green	—	—	4	—	'Hz
		Red	—	—	4	—	

※4 Tolerance: ±30%

■ Characteristics Diagrams

Forward Current vs. Forward Voltage

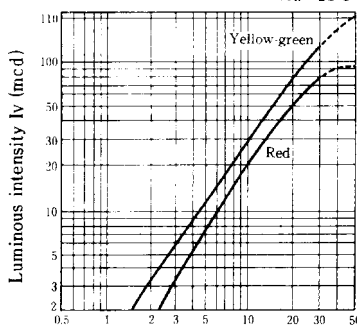
(Ta = 25°C)



Forward voltage V<sub>F</sub> (V)

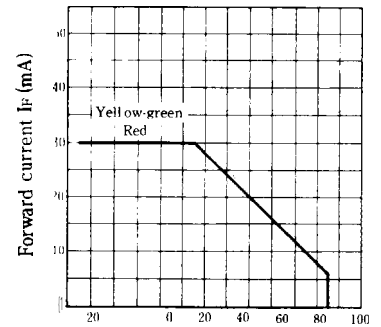
Luminous Intensity vs. Forward Current

(Ta = 25°C)



Forward current I<sub>F</sub> (mA)

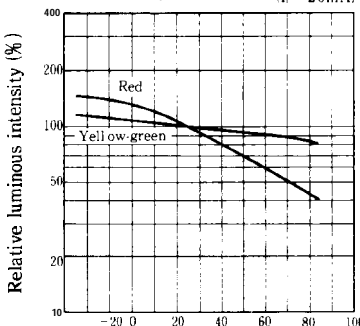
Forward Current Derating Curve



Ambient temperature Ta (°C)

Relative Luminous Intensity vs. Ambient Temperature

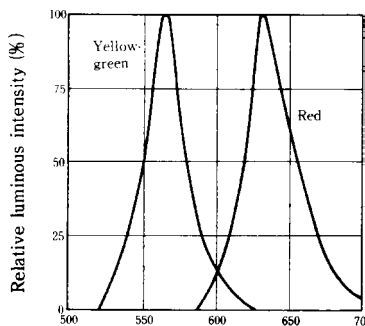
(I<sub>F</sub> = 20mA)



Ambient temperature Ta (°C)

Spectrum Distribution

(Ta = 25°C)



Wavelength λ (nm)

Radiation Diagram

(Ta = 25°C)

