

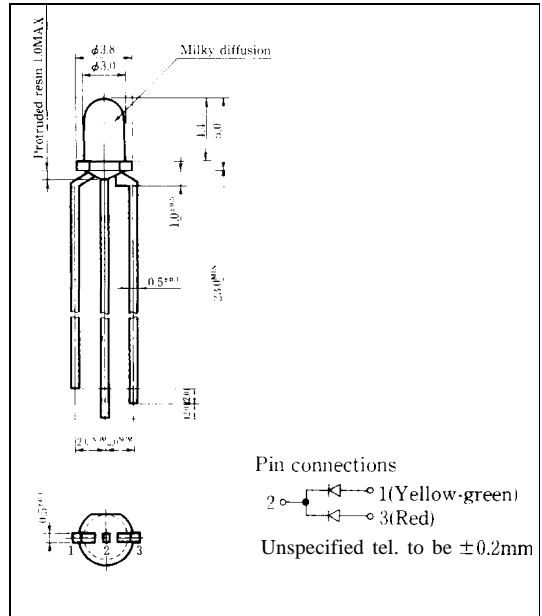
GL3ED8

3mm(T-1) Cylinder Type Dichromatic LED Lamps

Model No.
GL3ED8 Yellow-green
Red

GaP
GaAsP/GaP

Outline Dimensions (Unit: mm)



Features

1. $\phi 3\text{mm(T-1)}$ all resin mold
2. Radiation color : Red, yellow-green and orange (mixed color)
3. Milky diffusion lens type

Absolute Maximum Ratings

($T_a = 25^\circ\text{C}$)

Parameter	Symbol	GL3ED8				Unit
		Yellow-green	Red			
*1 Power dissipation	P	84	84			mW
Continuous forward current	I_F	30	30			mA
*2 peak forward current	I_{FM}	50	50			mA
Derating factor	DC	—	0.40	0.40		m A/°C
	Pulse		0.67	0.67		m A/°C
Reverse voltage	V_R		5			V
Operating temperature	T_{opr}		25 to +85			°C
Storage temperature	T_{stg}		25 to +100			°C
*3 Soldering temperature	T_{sol}		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 position of 1.6 mm from the bottom face of resin package

GL3ED8 (Yellow-green/Red)

■ Electro-optical Characteristics

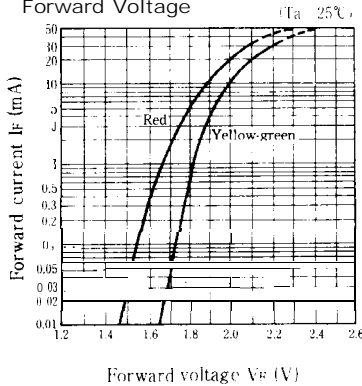
(Ta = 25°C)

Parameter	Symbol	Radiation color	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	Yellow-green	I _F = 20mA	—	2.1	2.8	V
		Red	I _F = 20mA	—	2.0	2.8	
*4 Luminous intensity	I _v	Yellow-green	I _F = 20mA	10	20	—	mcd
		Red	I _F = 20mA	5	15	—	
Peak emission wavelength	λ _p	Yellow-green	I _F = 20mA	—	565	—	‘m
		Red	I _F = 20mA	—	635	—	
Spectrum radiation bandwidth	Δλ	Yellow-green	I _F = 20mA	—	30	—	‘m
		Red	I _F = 20mA	—	35	—	
Reverse current	I _R	Yellow-green	V _R = 4V	—	—	10	μA
		Red	V _R = 4V	—	—	10	
Terminal capacitance	C _t	Yellow-green	V = 0V f = 1MHz	—	35	—	pF
		Red	V = 0V f = 1MHz	—	20	—	
Response frequency	f _c	Yellow-green	—	—	4	—	‘Hz
		Red	—	—	4	—	

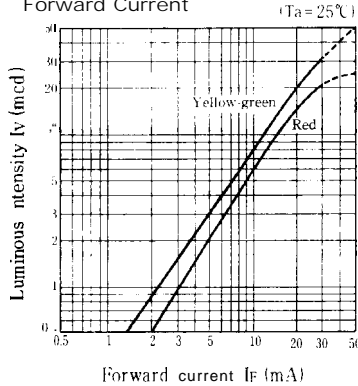
*4 Tolerance: ±30%

■ Characteristics Diagrams

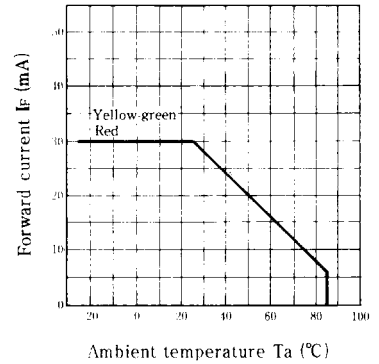
Forward Current vs. Forward Voltage



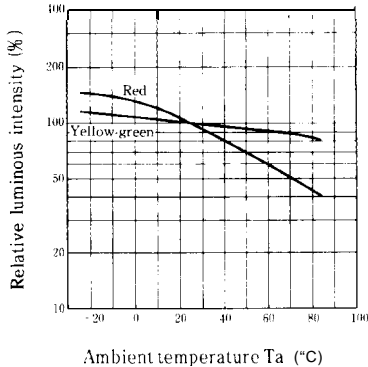
Luminous Intensity vs. Forward Current



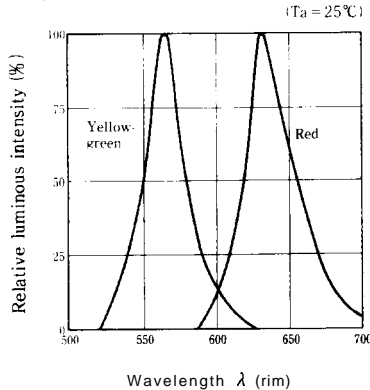
Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature (If = 20mA)



Spectrum Distribution



Radiation Diagram

