

# GL9U30

76.0mm Character Height  
Numeric LEDs

■ **Model No.**

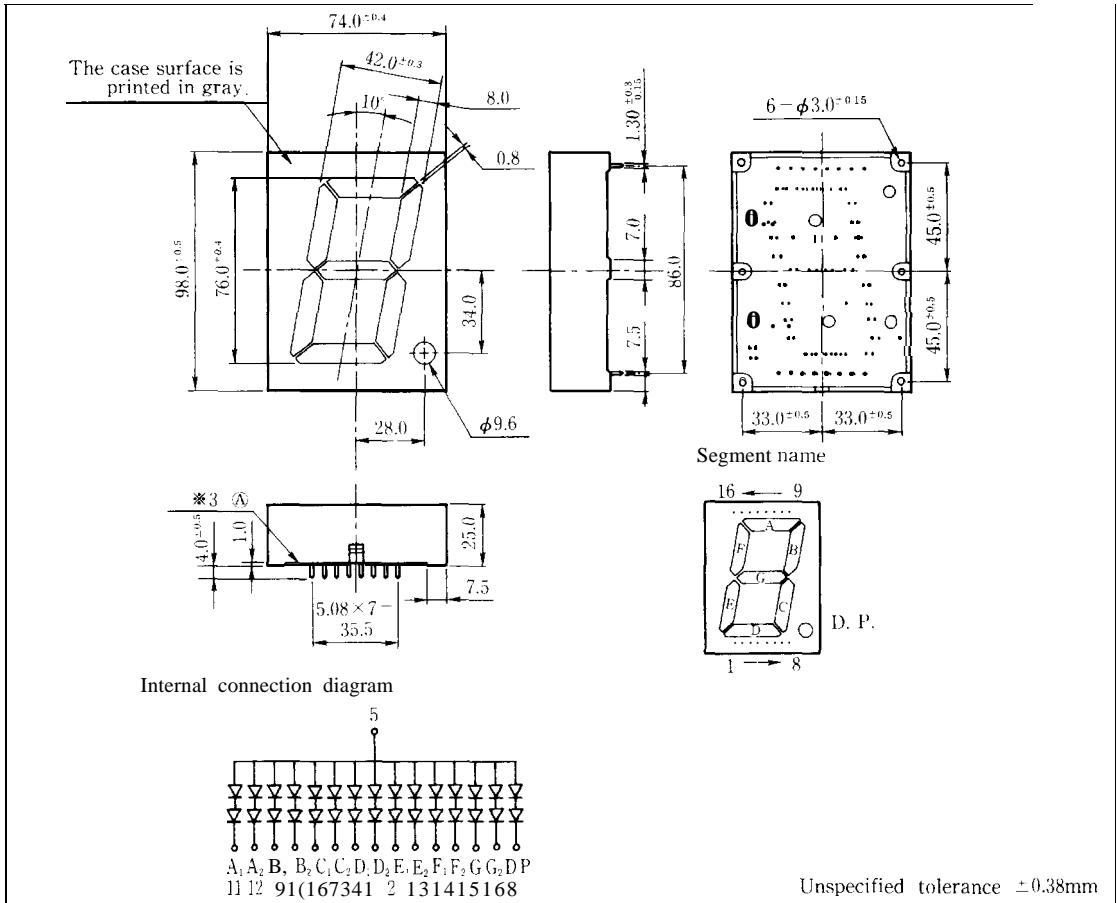
GL9U30 Red (Super-luminosity) GaAIAs/GaAIAs

■ **Features**

1. Character height : 76.0mm
2. 1 digit
3. Substrate type
4. Diamond cut type segments

■ **Outline Dimensions**

(Unit : mm)



5

**GL9U30**

**■ Absolute Maximum Ratings**

(T<sub>a</sub> = 25°C)

Parameter	Symbol	GL9U30				Unit
Power dissipation	*1 Per digit   P	2100				mW
Continuous forward current	*1 Per digit   I <sub>f</sub>	420				mA
	Per segment   I <sub>f</sub>	60				mA
	Per decimal point   I <sub>f</sub>	30				mA
*3 Peak forward current	Per segment   I <sub>F-M</sub>	100				mA
	Per decimal point   I <sub>F-M</sub>	50				mA
Derating factor	*1 Per digit   DC	7.00				mA/°C
	Per digit   Pulse	11.67				mA/°C
Reverse voltage	Per segment   V <sub>R</sub>	6				V
	Per decimal point   V <sub>R</sub>	6				V
Operating temperature	T <sub>opr</sub>	-25 to +75				°C
Storage temperature	T <sub>stg</sub>	-2.5 to +85				°C
*3 Soldering temperature	T <sub>sol</sub>	260 (within 5 seconds)				°C

\*1 Per digit :7 segments

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

\*3 At the position of 2.6mm from (A) level of outline dimensions

**GL9U30(Red)**

(Ta = 25°C)

**Electro-optical Characteristics**

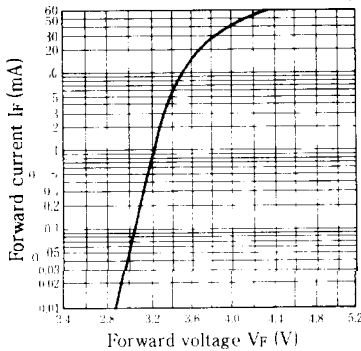
Parameter		Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	Per segment	V <sub>F</sub>	GL9U30	I <sub>F</sub> = 40mA		3.7	5.0	V
	Per decimal point		GL9U30	I <sub>F</sub> = 20mA		3.7	5.0	V
*4 Luminous intensity	Per segment	I <sub>v</sub>	GL9U30	I <sub>F</sub> = 40mA	50	150	—	mcd
	Per decimal point		GL9U30	I <sub>F</sub> = 20mA	16	50	—	mcd
Peak emission wavelength	Per segment	λ <sub>p</sub>	GL9U30	I <sub>F</sub> = 40mA		660	—	nm
	Per decimal point		GL9U30	I <sub>F</sub> = 20mA		660	—	nm
Spectrum radiation bandwidth	Per segment	Δλ	GL9U30	I <sub>F</sub> = 40mA		20	—	nm
	Per decimal point		GL9U30	I <sub>F</sub> = 20mA		20	—	nm
Reverse current	Per segment	I <sub>R</sub>	GL9U30	V = 4V			200	μA
	Per decimal point		GL9U30	V <sub>R</sub> = 4V			100	μA
*5 Response frequency		f <sub>c</sub>	GL9U30			7.0	—	MHz

\*4 Tolerance : ±30%    \*5 Per segment, or per decimal point

**Characteristics Diagrams**

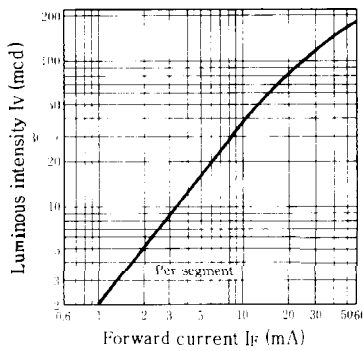
**Forward Current vs. Forward Voltage**

(Ta = 25°C)

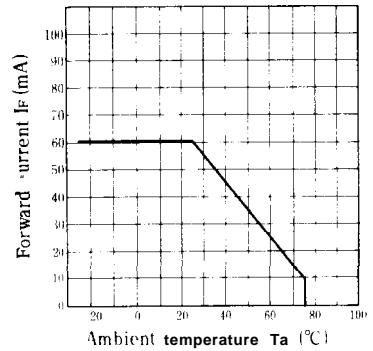


**Luminous Intensity vs. Forward Current**

(Ta = 25°C)

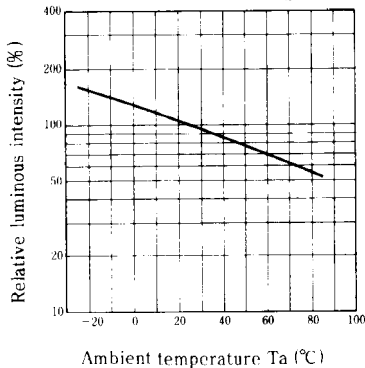


**Forward Current Derating Curve**



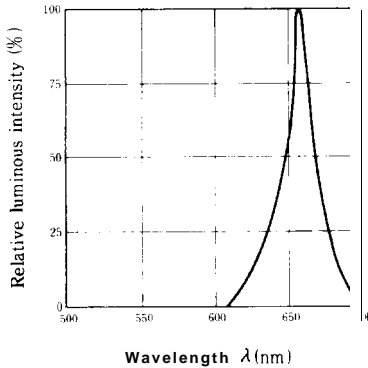
**Relative Luminous Intensity vs. Ambient Temperature**

I<sub>b</sub> = 20mA



**Spectrum Distribution**

(Ta = 25°C)



Wavelength λ (nm)

