

GL9C15 GL8U15 Series

38.1 mm Character Height
Numeric LEDs

■ Model No.

GL9U15/GL8U15
GL9L15/GL8L15

Red (Super-luminosity)
Red (High-luminosity)

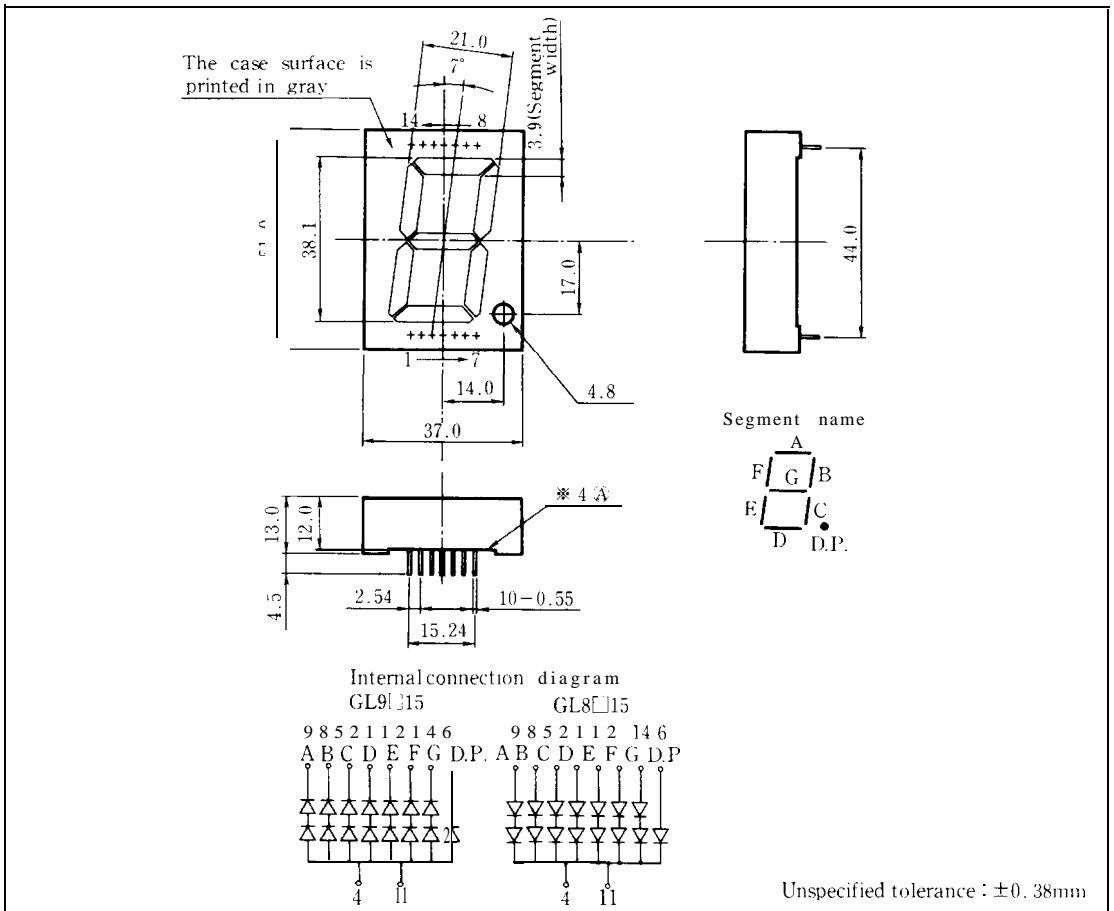
GaAlAs/GaAlAs
GaAlAs/GaAs

■ Features

1. Character height : 38.1mm
2. 1 digit
3. Case mold type
4. Diamond cut type segments

■ Outline Dimensions

(Unit: mm)



GL9□15 / GL8□15

■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter		Symbol	GL9U15	GL9L15				Unit
			GL8U15	GL8L15				
Power dissipation	*1 Per digit	P	672	770				mW
Continuous forward current	*1 Per digit	I _F	140	175				mA
	*2	I _F	20	25				mA
*3 Peak forward current	*2	I _{FM}	150	150				mA
Derating factor	*1 Per digit	DC	—	2.54	3.18			mA/°C
		Pulse	—	19.09	19.09			mA/°C
Reverse voltage	Per segment	V _R	6	12				v
	Per decimal point	V _R	4	5				v
Operating temperature		T _{opr}	-30 to +70					°C
Storage temperature		T _{stg}	-40 to +80					°C
*4 Soldering temperature		T _{sol}	260 (within 5 seconds)					°C

*1 Per digit: 7 segments

*2 Per segment, or per decimal point

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

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

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GL9U15/GL8UI 5(Red)

Electro-optical Characteristics

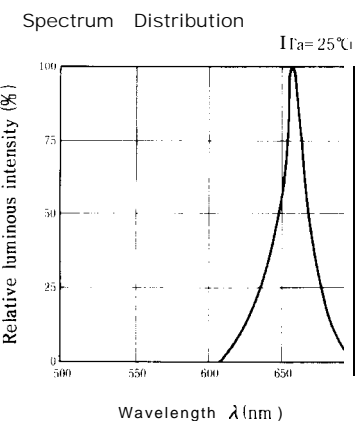
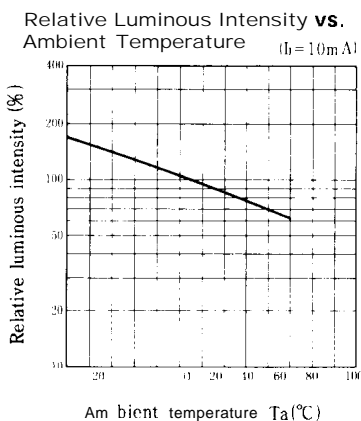
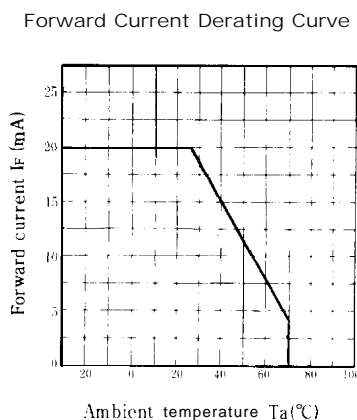
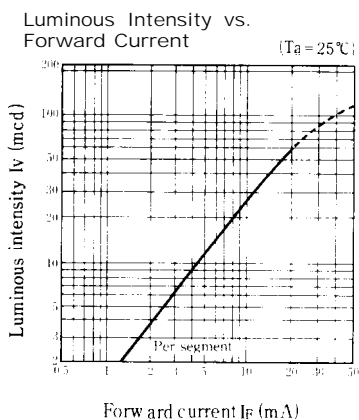
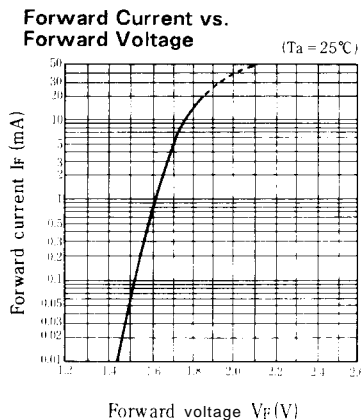
(Ta = 25°C)

Parameter		Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	Per segment	V _F	GL9U15/GL8U15	I _F = 10mA	—	3.5	4.8	V
	Per decimal point		GL9U15/GL8U15	I _F = 10mA		1.75	2.4	V
*5 Luminous intensity	Per segment	I _v	GL9U15/GL8U15	I _F = 10mA	12.5	27.0	—	mcd
	Per decimal point		GL9U15/GL8U15	I _F = 10mA	4.4	9.5	—	mcd
*2 Peak emission wave] ength		λ _p	GL9U15/GL8U15	I _F = 10mA	—	660	—	nm
*2 Spectrum radiation bandwidth		Δλ	GL9U15/GL8U15	I _F = 10mA	—	20	—	nm
Reverse current	Per segment	I _R	GL9U15/GL8U15	V _R = 5V		—	100	μA
	Per decimal point		GL9U15/GL8U15	V _R = 3V	—		100	μA
*2 Response frequency		f _c	GL9U15/GL8U15	—		8	—	MHz

*2 Per segment, or per decimal point

*5 Tolerance: ±30%

Characteristics Diagrams



GL9L15/GL8L1 5(Red)

Electro-optical Characteristics

(Ta = 25°C)

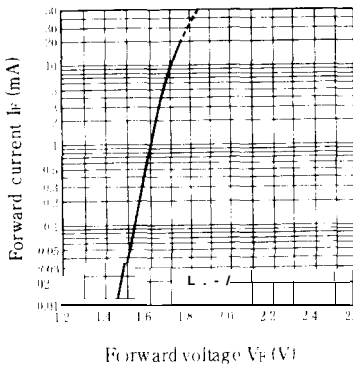
Parameter		Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	Per segment	V _F	GL9L15/GL8L15	I _F = 10mA	—	3.4	4.4	V
	Per decimal point		GL9L15/GL8L15	I _F = 10mA	—	1.7	2.2	V
*5 Luminous intensity	Per segment	I _v	GL9L15/GL8L15	I _F = 10mA	3.38	12.0	—	mcd
	Per decimal point		GL9L15/GL8L15	I _F = 10mA	—	(3.5)	—	mcd
*2 Peak emission wavelength		λ _p	GL9L15/GL8L15	I _F = 10mA	—	660	—	nm
*2 Spectrum radiation bandwidth		Δλ	GL9L15/GL8L15	I _F = 10mA	—	20	—	nm
Reverse current	Per segment	I _R	GL9L15/GL8L15	V _R = 5V	—	—	10	μA
	Per decimal point		GL9L15/GL8L15	V _R = 4V	—	—	10	μA
*2 Response frequency		f _r	GL9L15/GL8L15	—	—	8	—	MHz

*2 Per segment, or per decimal point

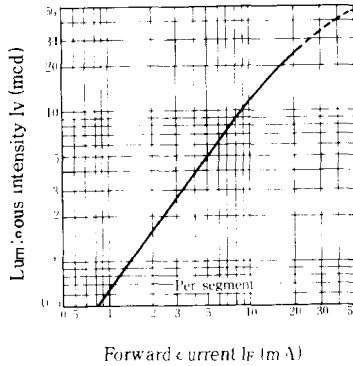
*5 Tolerance: ±30%

Characteristics Diagrams

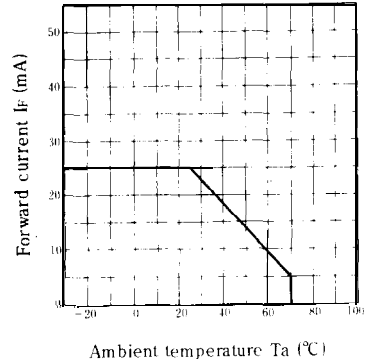
Forward Current vs. Forward Voltage (Ta = 25°C)



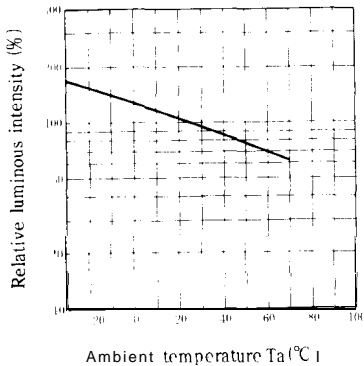
Luminous Intensity vs. Forward Current (Ta = 25°C)



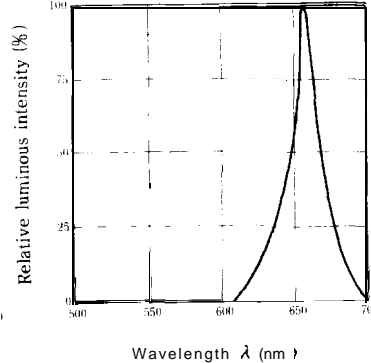
Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature (11,-10,11)



Spectrum Distribution (Ta = 25°C)



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