

Super-luminosity/High-luminosity Numeric LED

Super-luminosity/High-luminosity Numeric LED Figures shown below are values per segment.

(Ta=25°C)

Digit	Type	Character height (mm)	Type of display	Common pins	U (Red)		T (Red)		Outline dimensions	
					Model No.	Luminous intensity (mcd)	Model No.	Luminous intensity (mcd)		
						TYP.		TYP.	Page	Figure
1-digit	Mold Type	8.0		A			GL9T030	4.0	→	10
				K			GL8T030	4.0		
		10.16		A			GL9T040	4.25		9
				K			GL8T040	4.25		
		14.12		A			GL9T156	5.25		8
				K			GL8T156	5.25		
		20.32		A			GL9T08	2.2		6
				K			GL8T08	2.2		
		25.4		A	GL9U100	35.0	GL9T100	9.5	→	4
				K	GL8U100	35.0	GL8T100	9.5		
		38.1		A	GL9U15	27.0				3
				K	GL8U15	27.0				
Multi-digits	Substrate Type	76.0		A	GL9U30	(120)*			→	1
				K	GL8U30	(120)*				
	Mold Type	10.16		A			GL7T201	4.25	→	12
				K			GL6T201	4.25		
		8.0		A			GL3T422	1.5	→	19
				K			GL3T421	1.5		
		7.6		A			GL3T508D	1.5		21
				K			GL3T507D	1.5		

\*1 A: Anode common K: Cathode common \* Production after order confirmation

\* As for current conditions, refer to If in electro-optical characteristics

Absolute Maximum Ratings Figures shown below are values per segment.

(Ta=25°C)

Character height (mm)	Radiation color	Forward current IF (mA)	Peak forward current IFM*1 (mA)	Derating factor (mA/ °C)		Reverse voltage VR (V)	Operating temperature Topr. (°C)	Storage temperature Tstg. (°C)
				DC	Pulse			
8.0/10.16/14.12/20.32	T	20	100	0.36	1.82	5	-30 to +70	-40 to +80
25.4, 38.1, 76.0	U	20	150*2	0.36	2.73	6	-30 to +70	-40 to +80
25.4, 38.1	T	20	100	0.36	1.82	5	-30 to +70	-40 to +80

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

\*2 U type duty ratio=1/16, pulse width=0.1ms

Electro-optical Characteristics Figures shown below are values per segment.

(Ta=25°C)

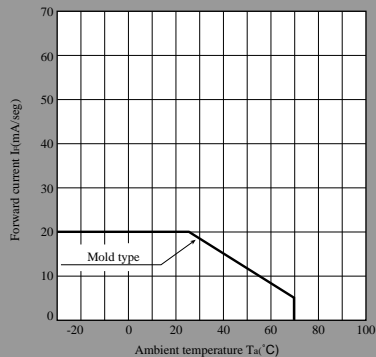
Character height (mm)	Radiation color	Forward current VF		Peak emission wavelength λp(nm)	Spectrum radiation bandwidth Δλ(nm)		Reverse current IR(μA)	
		TYP.	MAX		TYP.	IF (mA)	MAX.	VR (V)
8.0/10.16/14.12/20.32	T	1.7	2.2	660	20	10	10	4
25.4, 38.1, 76.0	U	3.5	4.8	660	20	10	100	5
25.4, 38.1	T	3.4	4.4	660	20	10	10	4

(Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.  
(Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

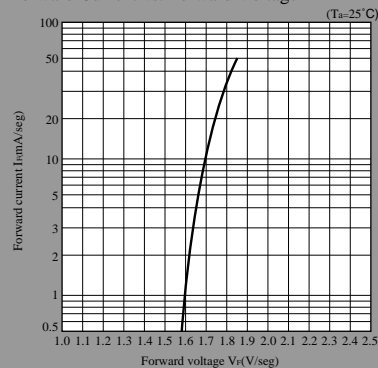
# Numeric LED Characteristics Diagrams

## T series

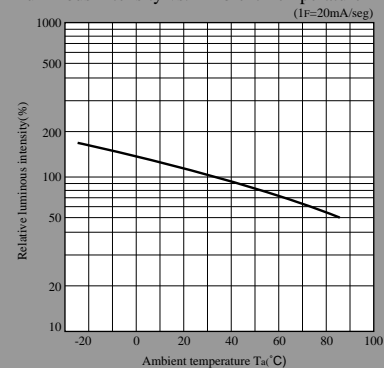
Forward Current Derating Curve



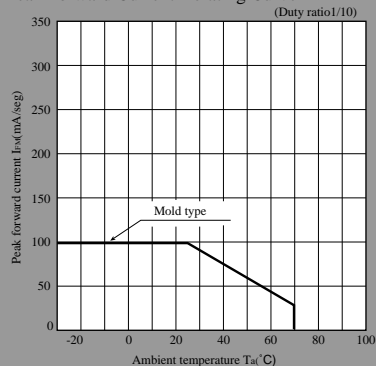
Forward Current vs. Forward Voltage\*



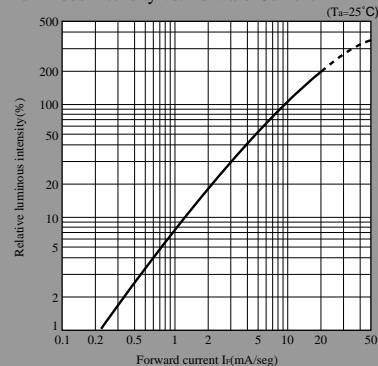
Luminous Intensity vs. Ambient Temperature



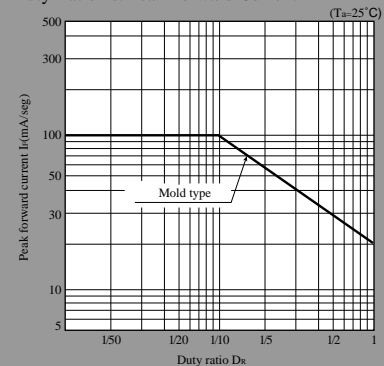
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current



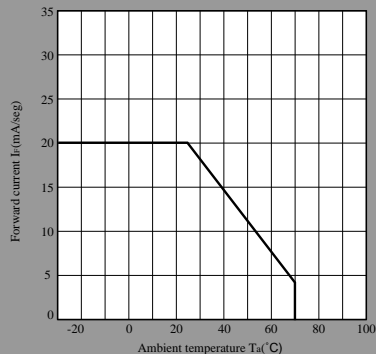
Duty Ratio vs. Peak Forward Current



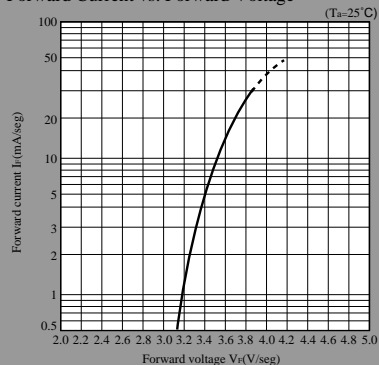
\* In case of 25.4mm: value per 1segment 1chip

# U series

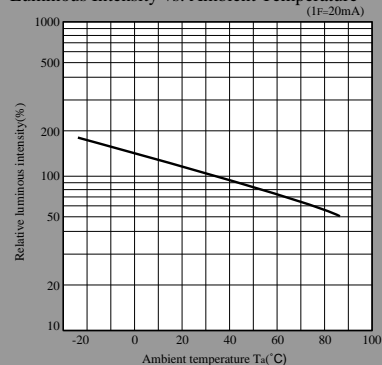
Forward Current Derating Curve



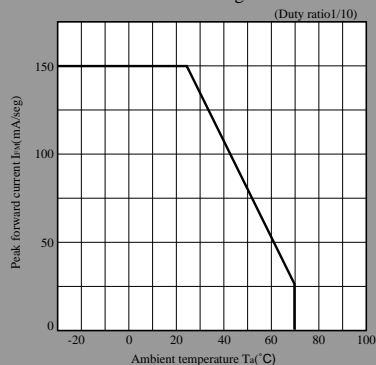
Forward Current vs. Forward Voltage\*



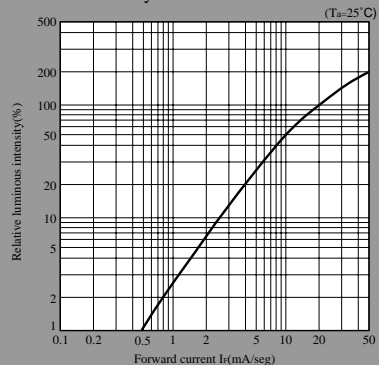
Luminous Intensity vs. Ambient Temperature



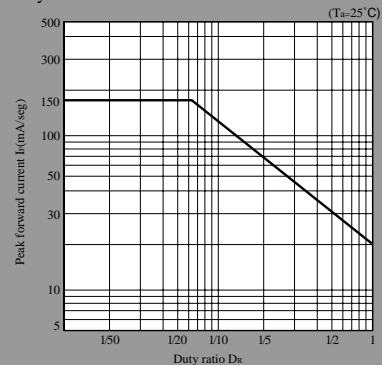
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current



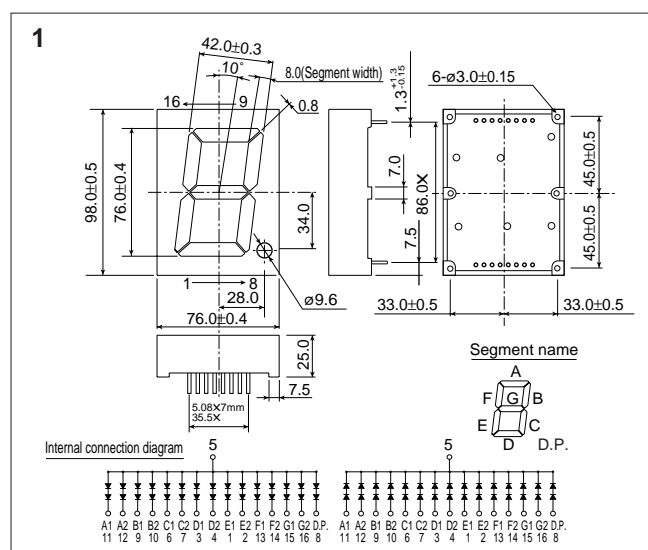
Duty Ratio vs. Peak Forward Current



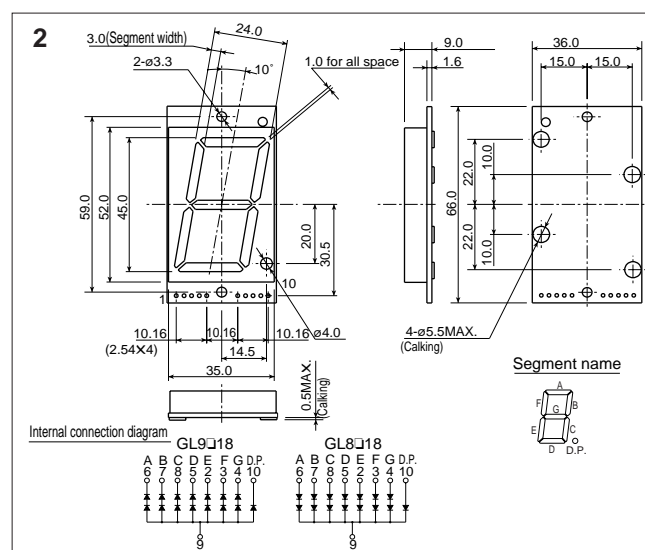
\* In case of 25.4/38.1/76.0mm: value per 1segment 1chip

- (Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.
- (Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

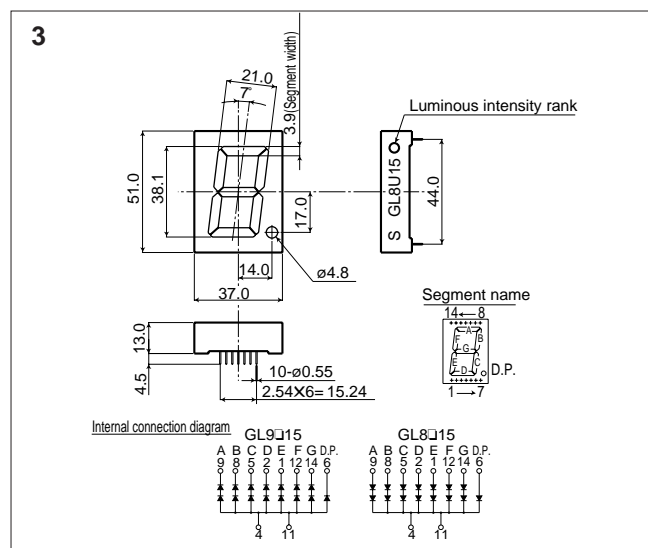
## Numeric LED Outline Dimensions(Unit:mm)



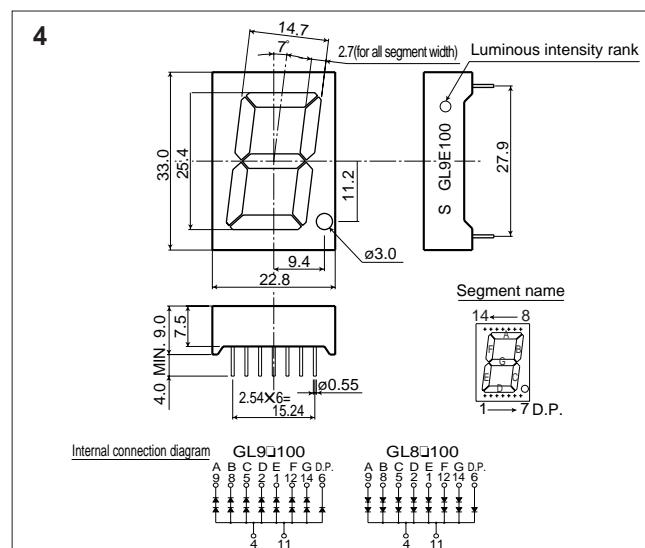
GL9□30 Series GL8□30 Series



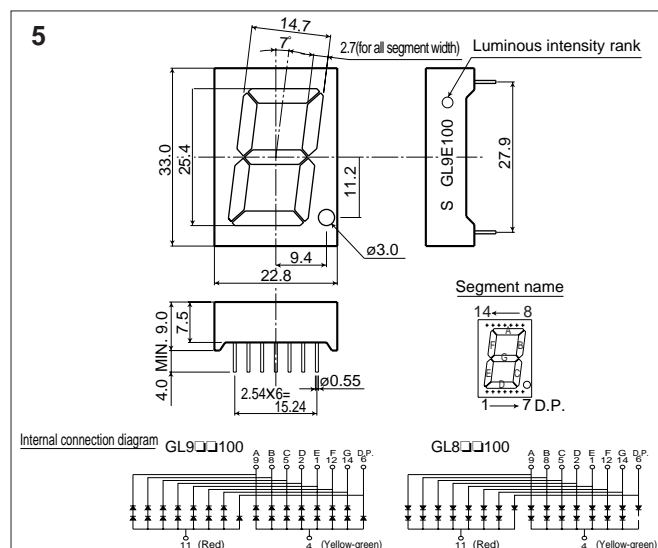
GL9□18 Series GL8□18 Series



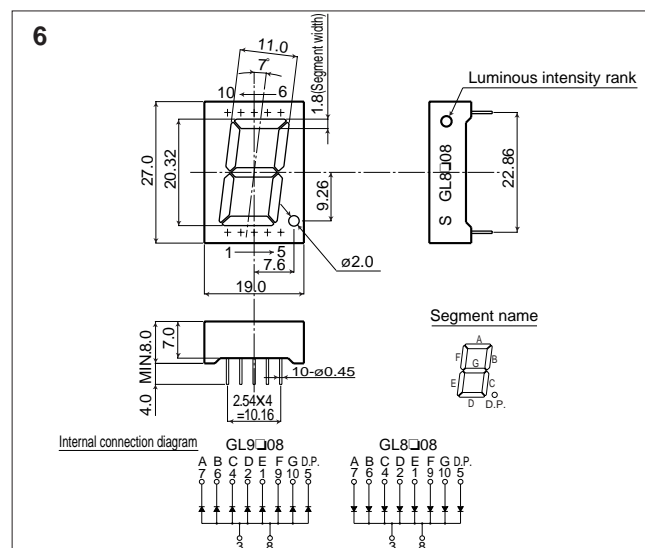
GL9□15 Series GL8□15 Series



GL9□100 Series GL8□100 Series



GL9□□100 Series GL8□□100 Series



GL9□08 Series GL8□08 Series

(Notice) ● In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

(Internet) ● Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

\_\_\_\_\_



(Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecq/>)



(Notice) ● In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

(Internet) ● Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

