

GL2□□6 Series Lamps ϕ 2mm convex " " "ED

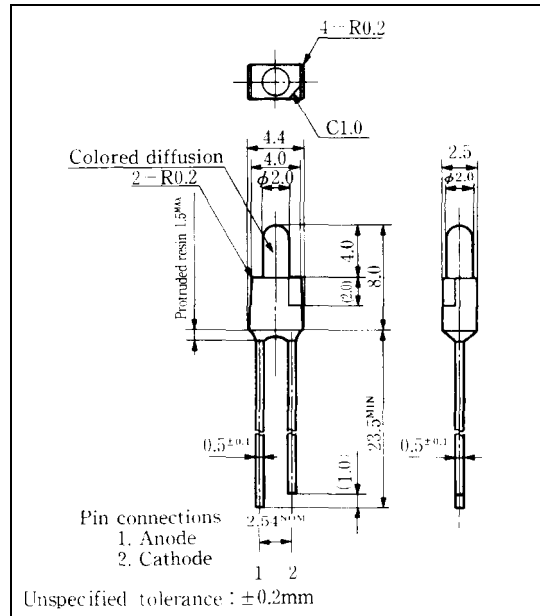
Model No.

GL2PR6 Red
 GL2HD6 Red
 GL2HS6 Sunset orange
 GL2HY6 Yellow
 GL2EG6 Yellow-green

GaP
 GaAsP/GaP
 GaAsP/GaP
 GaAsP/GaP
 GaP

Outline Dimensions

(Unit: mm)



Features

- ϕ 2mm convex type all resin mold
- Colored diffusion lens type

Absolute Maximum Ratings

(Ta = 25°C)

Parameter	Symbol	GL2PR6	GL2HD6	GL2EG6	Unit
		GL2HS6	GL2HY6		
Power dissipation	P	23	84	84	mW
Continuous forward current	I _F	10	30	30	mA
※1 Peak forward current	I _{FM}	50	50	50	mA
Berating factor	DC	0.13	0.40	0.40	mA/°C
	Pulse	0.67	0.67	0.67	mA/°C
Reverse voltage	V _R	5	5	5	V
operating temperature	T _{opr}	-25 to +85			°C
Storage temperature	T _{stg}	-25 to +100			°C
※2 Soldering temperature	T _{sol}	260(within 5 seconds)			°C

※1 Duty ratio = 1/10 , Pulse width = 0.1ms

※2 At the position of 1.6mm from the bottom face of resin package

SHARP

GL2PR6 (Red) / GL2HD6 (Red)

■ Electro-optical Characteristics

(Ta=25°C)

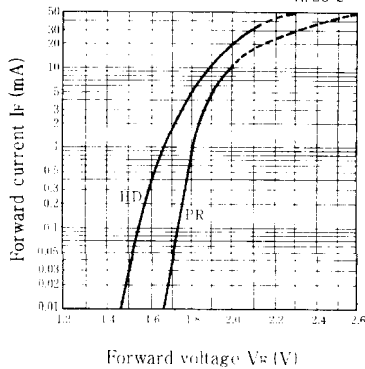
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	GL2PR6	I _F = 5mA		1.9	2.3	V
		GL2HD6	I _F = 20mA		2.0	2.8	
*3 Luminous intensity	I _v	GL2PR6	I _F = 5mA	0.50	2.0	—	mcd
		GL2HD6	I _F = 20mA	4.0	15	—	
Peak emission wavelength	λ _p	GL2PR6	I _F = 5mA		695	—	nm
		GL2HD6	I _F = 20mA		635	—	
Spectrum radiation bandwidth	Δλ	GL2PR6	I _F = 5mA		100	—	nm
		GL2HD6	I _F = 20mA		35	—	
Reverse current	I _R	GL2PR6	V _R = 4V			10	μA
		GL2HD6	V _R = 4V			10	
Terminal capacitance	C _t	GL2PR6	V = 0V f = 1 MHz		55		pF
		GL2HD6	V = 0V f = 1 MHz		20		
Response frequency	f _c	GL2PR6	—		4		MHz
		GL2HD6	—		4		

*3 Tolerance: ±30%

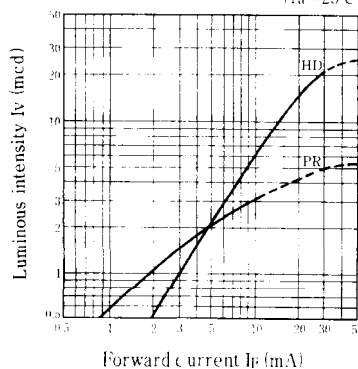
■ Characteristics Diagrams

Forward Current vs.
Forward Voltage

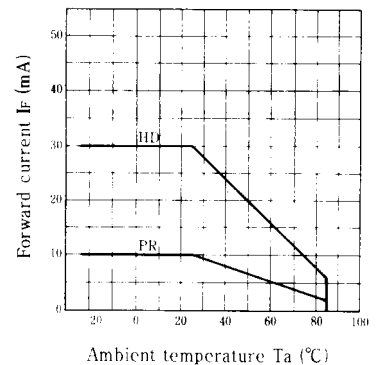
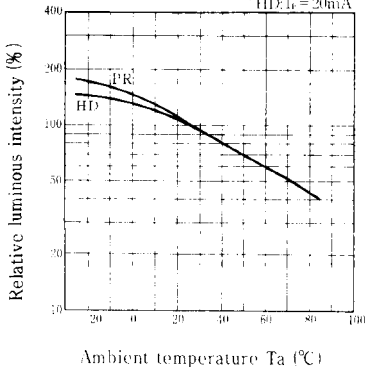
(Ta=25°C)

Luminous Intensity vs.
Forward Current

(Ta=25°C)

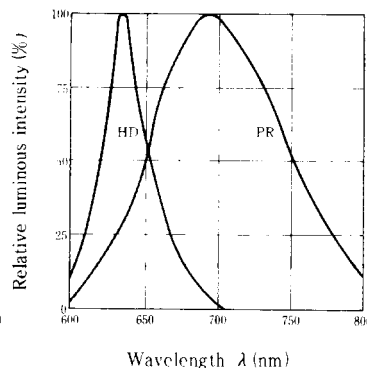


Forward Current Derating Curve

Relative Luminous Intensity vs.
Ambient TemperaturePR: I_F = 5mA
HD: I_F = 20mA

Spectrum Distribution

(Ta=25°C)



GL2HS6 (Sunset orange) / GL2HY6 (Yellow)

■ Electro-optical Characteristics

(Ta = 25°C)

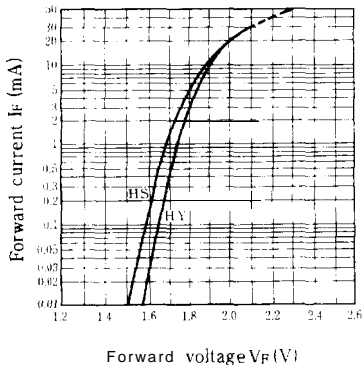
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V _F	GL2HS6	I _F = 20mA	—	2.0	2.8	V
		GL2HY6	I _F = 20mA		2.0	2.8	
*3 Luminous intensity	I _v	GL2HS6	I _F = 20mA	3.0	15	—	mcd
		GL2HY6	I _F = 20mA	3.0	15	—	
Peak emission wavelength	λ _p	GL2HS6	I _F = 20mA	—	610	—	nm
		GL2HY6	I _F = 20mA		585	—	
Spectrum radiation bandwidth	Δλ	GL2HS6	I _F = 20mA		35	—	'm
		GL2HY6	I _F = 20mA		30		
Reverse current	I _R	GL2HS6	V _R = 4V	—		10	μA
		GL2HY6	V _R = 4V			10	
Terminal capacitance	C _t	GL2HS6	V = 0V f = 1 MHz	—	15	—	PF
		GL2HY6	V = 0V f = 1MHz		35	—	
Response frequency	f _c	GL2HS6	—		4	—	MHz
		GL2HY6	—				

*3 Tolerance: ±30%

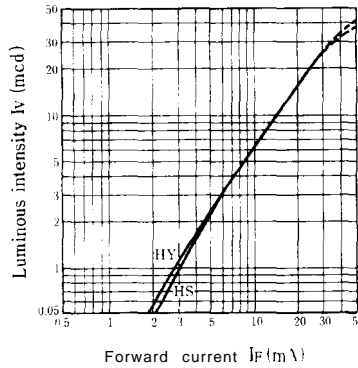
3

■ Characteristics Diagrams

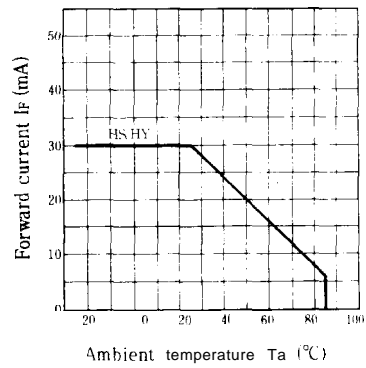
Forward Current vs. Forward Voltage (Ta = 25°C)



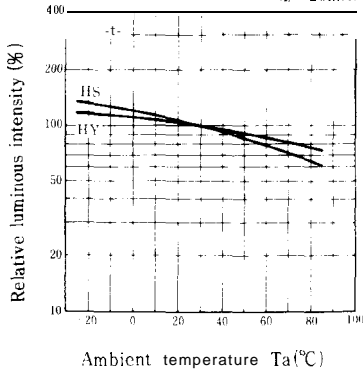
Luminous Intensity vs. Forward Current (Ta = 25°C)



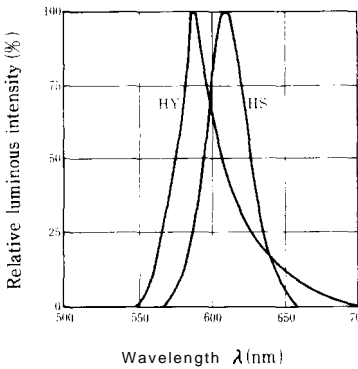
Forward Current Derating Curve



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



Spectrum Distribution (Ta = 25°C)



GL2EG6 (Yellow-green)

■ Electro-optical Characteristics

(Ta = 25°C)

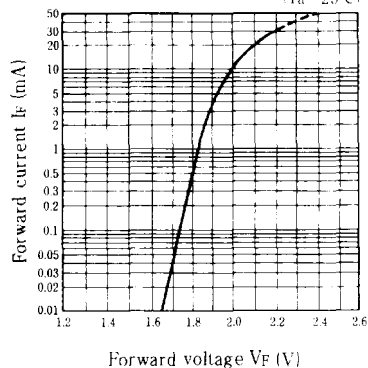
Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	GL2EG6	$I_F = 20\text{mA}$		2.1	2.8	V
※3 Luminous intensity	I_v	GL2EG6	$I_F = 20\text{mA}$	6.0	15	—	mcd
Peak emission wavelength	λ_p	GL2EG6	$I_F = 20\text{mA}$		565	—	nm
Spectrum radiation bandwidth	$\Delta \lambda$	GL2EG6	$I_F = 20\text{mA}$	—	30	—	nm
Reverse current	I_R	GL2EG6	$V_R = 4\text{V}$		—	10	μA
Terminal capacitance	C_t	GL2EG6	$V = 0\text{V}$ $f = 1\text{MHz}$	—	35	—	pF
Response frequency	f_c	GL2EG6	—		4	—	MHz

※3 Tolerance: ±30%

■ Characteristics Diagrams

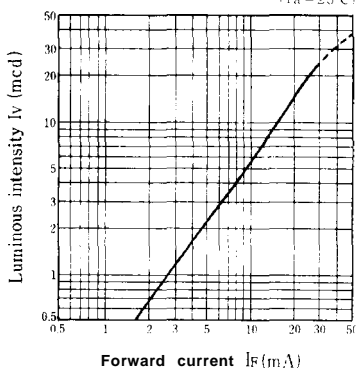
Forward Current vs. Forward Voltage

(Ta = 25°C)

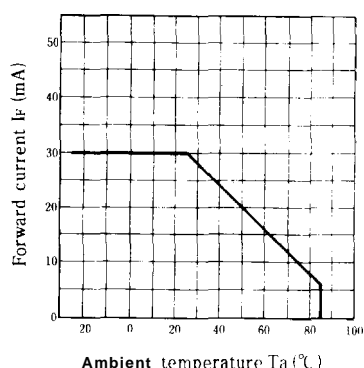


Luminous Intensity vs. Forward Current

(Ta = 25°C)

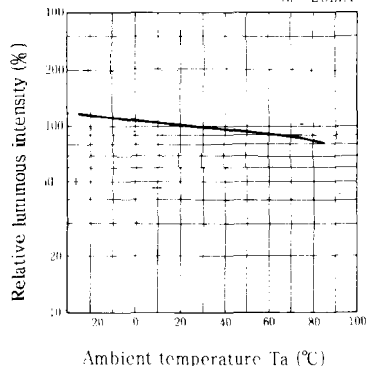


Forward Current Derating Curve



Relative Luminous Intensity vs. Ambient Temperature

(If = 20mA)



Spectrum Distribution

(Ta = 25°C)

