GL047□□ Series

0.28mm□ LED Chips

■ Model No.

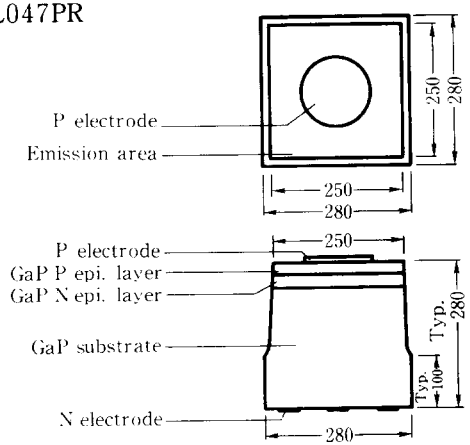
GL047PR	Red	GaP/GaP
GL047HD	Red	GaAsP/GaP
GL047HY	Yellow	GaAsP/GaP
GL047EG	Yellow-green	GaP/GaP

■ Features

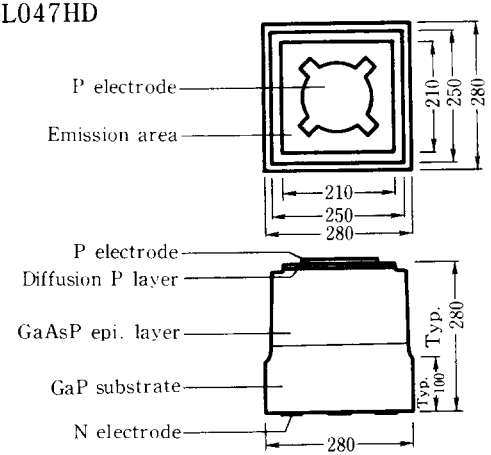
1. Chip size : 0.28mm□
2. Emission area : 0.25mm□
3. Electrode N(Cathode) Side : Gold alloy
   P(Anode) Side : Aluminum alloy

■ Outline Dimensions (Unit: μm)

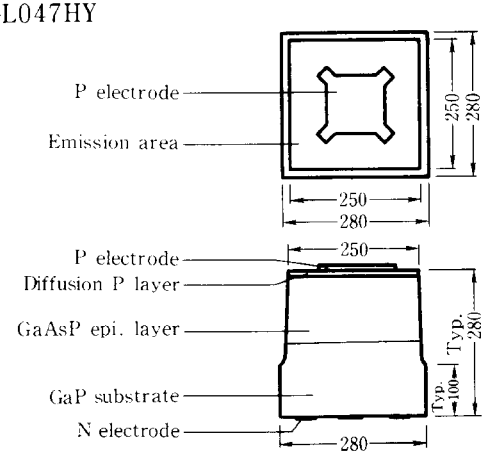
GL047PR



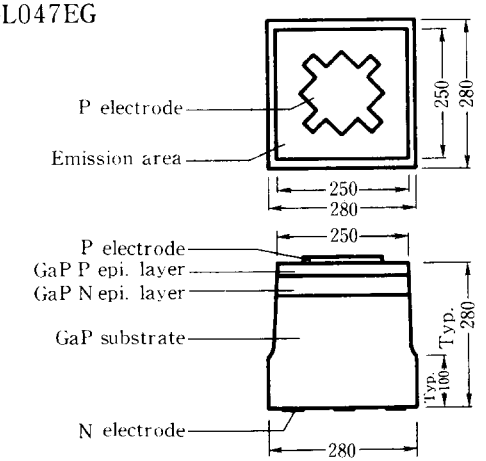
GL047HD



GL047HY



GL047EG



9

GL047PR (Red) / GL047HD (Red)

■ Electro-optical Characteristics

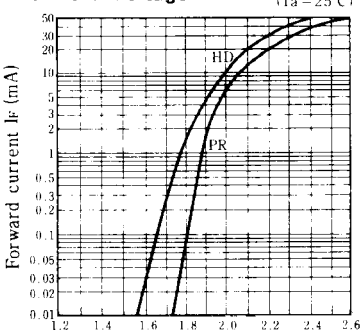
(Ta=25℃)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	GL047PR	I_F=20mA	1.8	2.2	2.5	V
		GL047HD	I_F=20mA	1.8	2,1	2.6	
‘l Luminous intensity	I\	GL047PR	I_F=20mA	400	–	–	μcd
		GL047HD	I_F=20mA	2000	–	–	
Peak emission wavelength	λ_p	GL047PR	I_F=20mA	—	700	–	‘m
		GL047HD	I_F=20mA	—	630	–	
Spectrum width of half value	Δλ	GL047PR	I_F=20mA	—	100	–	nm
		GL047HD	I_F=20mA		35	–	
Reverse current	I_R	GL047PR	V_R=3V	—	–	**10**	μA
		GL047HD	V_R=3V	—		10	
Capacitance	co	GL047PR	V_O=0V f=1 MHz	–	40	–	pF
		GL047HD	V_O=0V f=1 MHz	–	10	–	
Response frequency	f_c	GL047PR	–	—		–	MHz
		GL047HD	–	—	–	–	

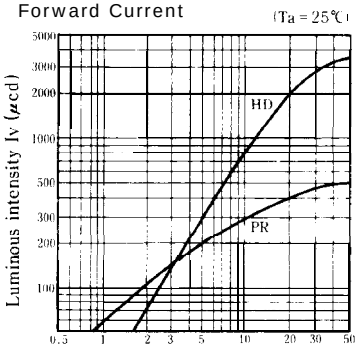
※1 Tolerance: ±30%

■ Characteristics Diagrams

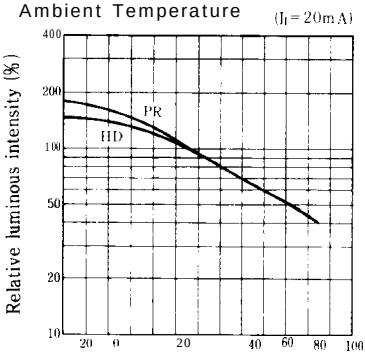
Forward Current vs. Forward Voltage (Ta=25℃)



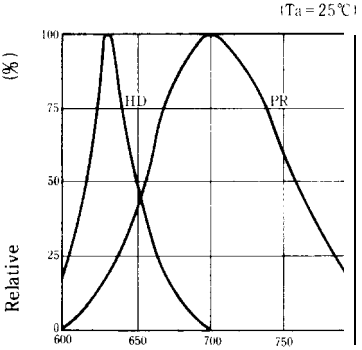
Luminous Intensity vs. Forward Current (Ta=25℃)



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



Spectrum Distribution (Ta=25℃)



GL047HY (Yellow) / GL047EG (Yellow-green)

■ Electro-optical Characteristics

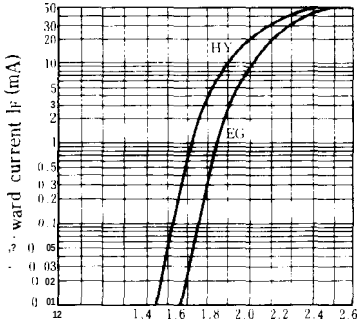
(Ta =25°C)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	GL047HY	I_F=20mA	1.9	2.1	2.6	"
		GL047EG	I_F=20mA	1.8	2.2	2.5	
※1 Luminous intensity	I_V	GL047HY	I_F=20mA	2000	–	–	μcd
		GL047EG	I_F=20mA	4000	–	–	
Peak emission wavelength	λ_p	GL047HY	I_F=20mA	–	585	–	'm
		GL047EG	I_F=20mA	–	565	–	
Spectrum width of half value	$\Delta\lambda$	GL047HY	I_F=20mA		32	–	'm
		GL047EG	I_F=20mA	–	30	–	
Reverse current	I_R	GL047HY	V_R=3V	–	·	10	μA
		GL047EG	V_R=3V	–	–	10	
Capacitance	C_o	GL047HY	V_O=0V f=1 MHz	–	10	–	pF
		GL047EG	V_O=0V f=1 MHz	–	20	–	
Response frequency	f_c	GL047HY	–		–	–	MHz
		GL047EG	–		–	–	

※1 Tolerance: ±30%

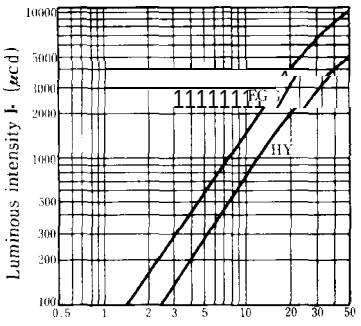
■ Characteristics Diagrams

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



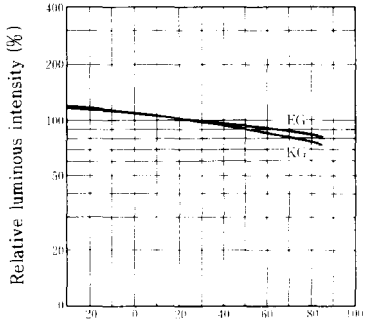
Forward voltage V_F (V)

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



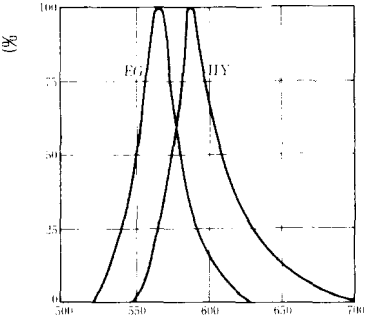
Forward current I_F (mA)

Relative Luminous Intensity vs. Ambient Temperature



Ambient temperature Ta (°C)

Spectrum Distribution (Ta = 25°C)



Wavelength λ (nm)

9