GL9□□25 Series

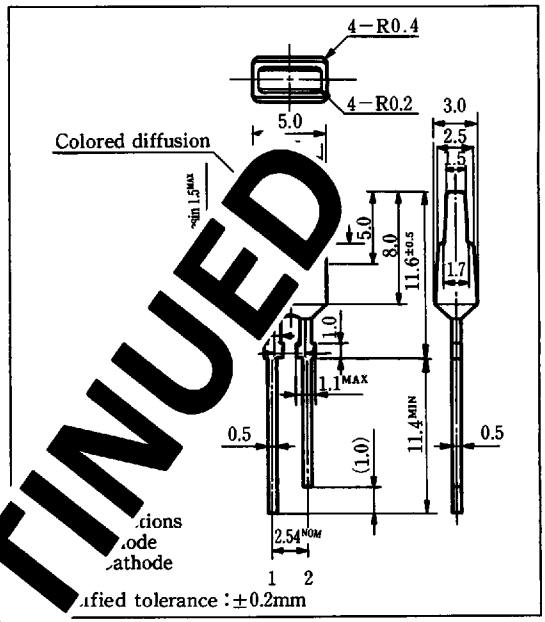
Rectangle Type LED Lamps

T-41-23

■ Model No.

GL9PR25	Red	GaP
GL9HY25	Yellow	GaAsP/GaP
GL9EG25	Yellow-green	GaP

■ Outline Dimensions (Unit: mm)



■ Features

1. 1.5mm × 4.5mm rectangle type all resin mold
2. Colored diffusion lens type

■ Absolute Maximum Ratings

(Ta = 25°C)

Parameter		Symbol	GL9PR25 / GL9HY25 / GL9EG25					Unit
Power dissipation		P	23	84				mW
Continuous forward c		I_F	10	30				mA
※1 Peak forward curr		I_{FM}	50	50				mA
Derating fact	DC	−	0.13	0.40				mA/°C
	Pulse	−	0.67	0.67				mA/°C
Reverse voltage		V_R	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

GL9PR25 (Red)

T-41-23

■ Electro-optical Characteristics

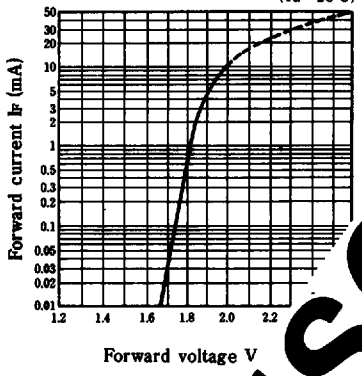
(Ta=25℃)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	GL9PR25	I_F=5mA	–	1.9	2.3	V
※3 Luminous intensity	I_V	GL9PR25	I_F=5mA	0.10	0.25	–	mcd
Peak emission wavelength	λ_p	GL9PR25	I_F=5mA	–	695	–	nm
Spectrum radiation bandwidth	$\Delta\lambda$	GL9PR25	I_F=5mA		100	–	nm
Reverse current	I_R	GL9PR25	V_R=4V		–	10	μA
Terminal capacitance	C_t	GL9PR25	V=0V	–	55	–	pF
Response frequency	f_c	GL9PR25	–	–	4	–	MHz

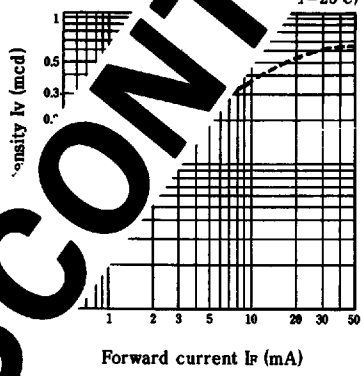
※3 Tolerance: ±30%

■ Characteristics Diagrams

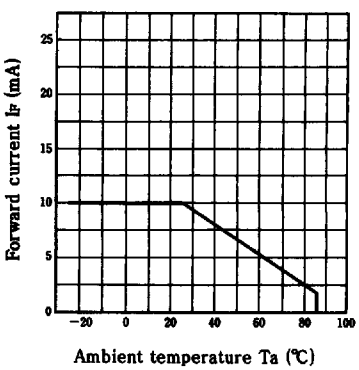
Forward Current vs. Forward Voltage



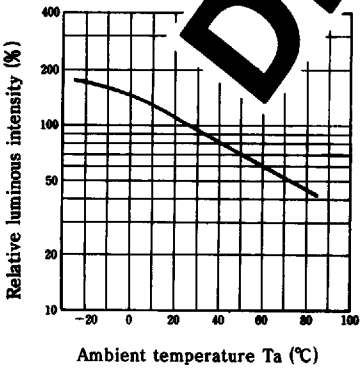
Luminous Int… Forward Cur…



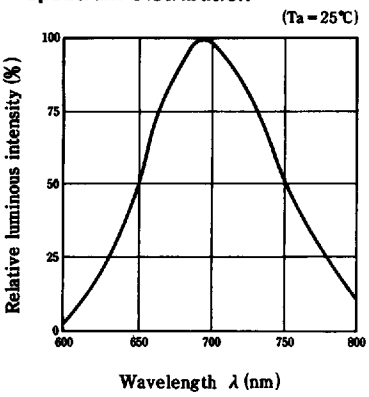
Forward Current Derating Curve



Relative Luminous … Ambient Tempera…



Spectrum Distribution



GL9HY25 (Yellow)

■ Electro-optical Characteristics

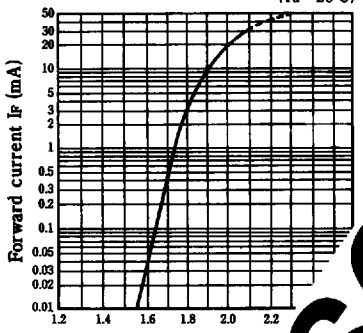
(Ta=25℃)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	GL9HY25	I_F=20mA	–	2.0	2.8	V
※3 Luminous intensity	Iv	GL9HY25	I_F=20mA	0.15	0.50	–	mcd
Peak emission wavelength	λ_p	GL9HY25	I_F=20mA	–	585	–	nm
Spectrum radiation bandwidth	$\Delta\lambda$	GL9HY25	I_F=20mA		30	–	nm
Reverse current	I_R	GL9HY25	V_R=4V		–	10	μA
Terminal capacitance	C_t	GL9HY25	V=0V	–	35	–	pF
Response frequency	fc	GL9HY25	–	–	4	–	MHz

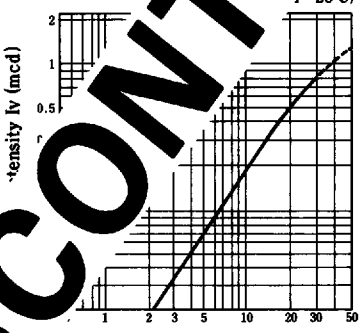
※3 Tolerance: ±30%

■ Characteristics Diagrams

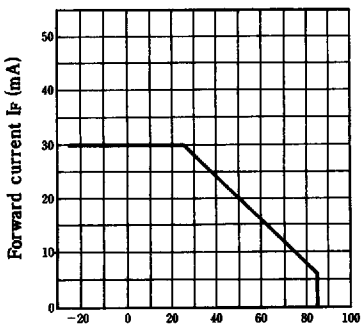
Forward Current vs. Forward Voltage (Ta=25℃)



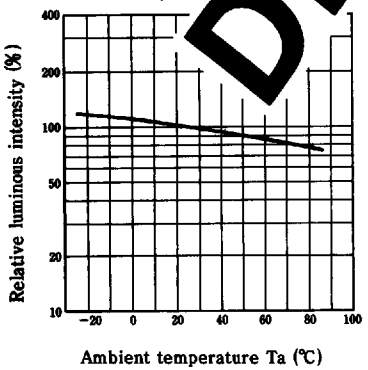
Luminous Inte Forward Cur (Ta=25℃)



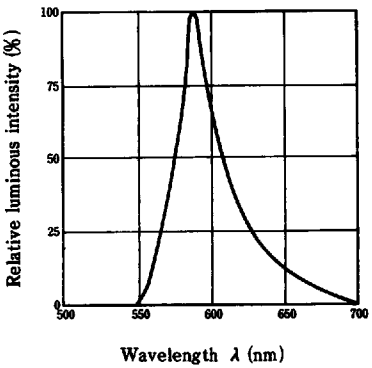
Forward Current Derating Curve



Relative Luminous I Ambient Tempera



Spectrum Distribution (Ta=25℃)



3

GL9EG25 (Yellow-green)

Electro-optical Characteristics

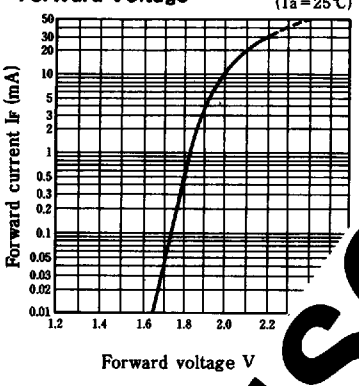
(Ta=25℃)

Parameter	Symbol	Model No.	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	GL9EG25	I_F=20mA	–	2.1	2.8	V
※3 Luminous intensity	I_V	GL9EG25	I_F=20mA	1.5	3.5	–	mcd
Peak emission wavelength	λ_p	GL9EG25	I_F=20mA	–	565	–	nm
Spectrum radiation bandwidth	$\Delta\lambda$	GL9EG25	I_F=20mA		30	–	nm
Reverse current	I_R	GL9EG25	V_R=4V		–	10	μA
Terminal capacitance	C_t	GL9EG25	V=0V	–	35	–	pF
Response frequency	f_c	GL9EG25	–	–	4	–	MHz

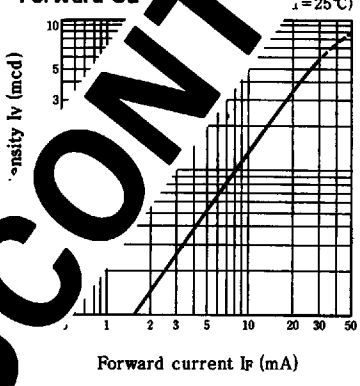
※3 Tolerance: ±30%

Characteristics Diagrams

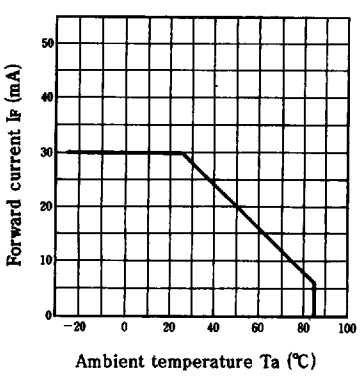
Forward Current vs. Forward Voltage



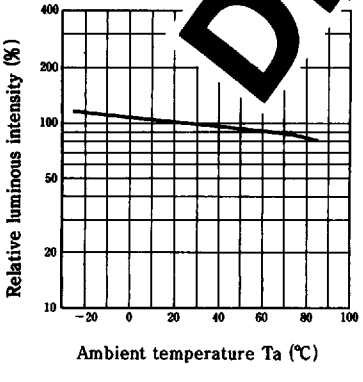
Luminous Int… Forward Cur…



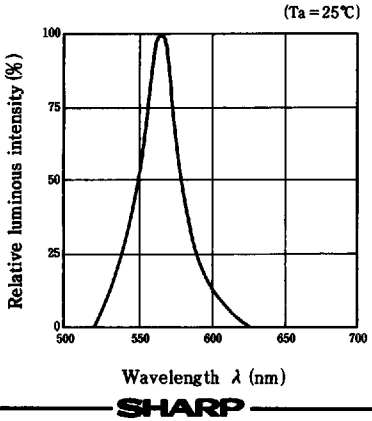
Forward Current Derating Curve



Relative Luminous … Ambient Tempera…



Spectrum Distribution



SHARP CORP 51E D 8180798 0007556 20T SRPJ

Packing Specifications for LED Chips

T-90-20

1. Chip Packing

The chips are pasted up on the center of an adhesive sheet, then covered with a protective sheet.

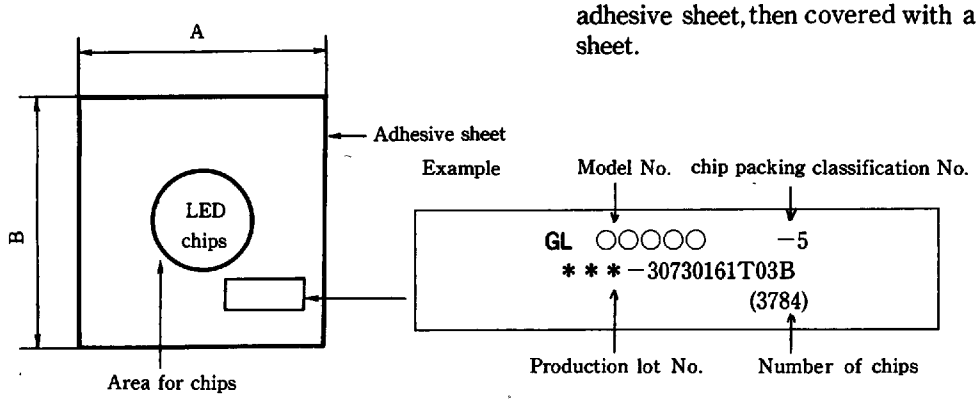


Fig. 1

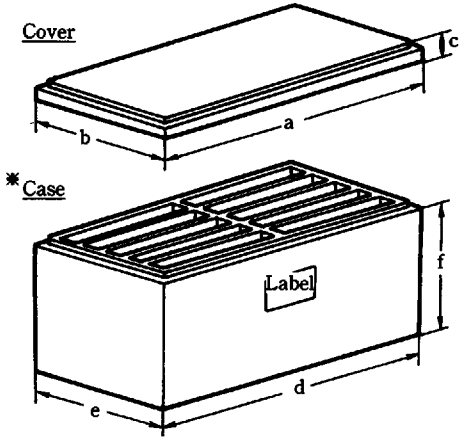
2. Sheet Packing

PART No.	
QUANTITY	0 0 pcs.
(	UNITS)
ID No.	
SHARP CORPORATION	

Put the chip-pasted sheet into a dedicated styrol case, then paste up a label shown in Fig. 2 on its side.

Fig. 2

3. Styrol Case



*Divided into 10 divisions

Fig. 3

(Unit : mm)

Adhesive sheet size A × B	Cover			Case			1 division		
	a	b	c	d	e	f	Length	Width	Depth
110×110	265	170	22.5	265	170	125	115	22.5	115
150×150	350	170	22.5	350	170	165	155	22.5	155
180×180	465	200	22.5	465	200	220	205	25	205
200×200	465	200	22.5	465	200	220	205	25	205

As to details such as materials, colors and paste intensity of chip-pasted sheets, etc., please contact our sales department.