GL371/GL372

Compact Resin Stem Type Infrared Emitting Diode

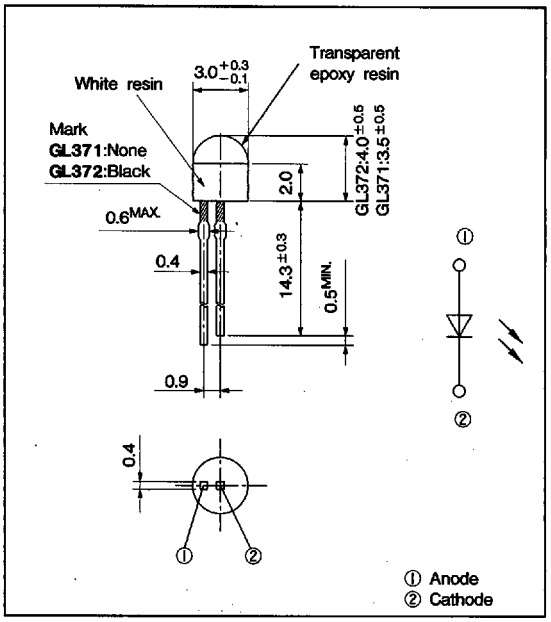
■ Features

1. ϕ3mm compact, resin stem type
2. Wide beam angle [GL371 $\Delta\theta$: TYP. ±90°, GL372 $\Delta\theta$: TYP. ±70°]
3. High output
   (ϕ_e: MIN. 1.7mW at I_F=40mA)

■ Applications

1. Floppy disk drives
2. Smoke detectors, optoelectronic switches
3. Infrared applied systems

■ Outline Dimensions (Unit : mm)



■ Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit
Power dissipation	P	75	mW
Forward current	I_F	50	mA
*1Peak Forward current	I_{FM}	1	A
Reverse voltage	V_R	6	V
Operating temperature	T_{opr}	−25 to +85	℃
Storage temperature	T_{stg}	−25 to +85	℃
*2Soldering temperature	T_{sol}	260	℃

*1 Pulse width≦100 μs, Duty ratio=0.01
*2 For 3 seconds at the position of 1.5mm from the bottom face of resin package.

■ Electro-optical Characteristics (Ta=25℃)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage		V_F	I_F=40mA	−	1.3	1.6	V
Peak forward voltage		V_{FM}	I_{FM}=0.5A	−	3.0	4.0	V
Reverse current		I_R	V_R=3V	−	−	10	μA
Terminal capacitance		C_t	V_R=0, f=1MHz	−	50	−	pF
Frequency response		f_c		−	300	−	kHz
Radiant flux		Φ_e	I_F=40mA	1.7	3.3	−	mW
Peak emission wavelength		λ_p	I_F=40mA	−	950	−	nm
Half intensity wavelength		$\Delta\lambda$	I_F=40mA	−	45	−	nm
Half intensity angle	GL371	$\Delta\theta$	I_F=40mA	−	±90	−	°
	GL372			−	±70	−	°

Fig. 1 Forward Current vs. Ambient Temperature

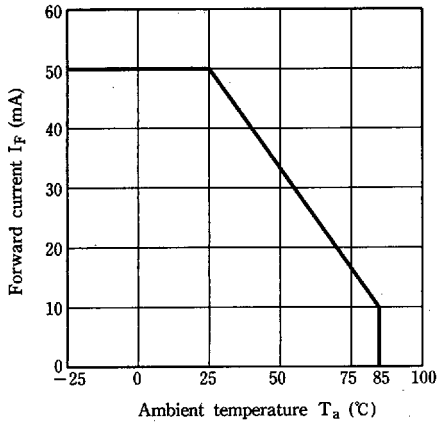


Fig. 2 Peak Forward Current vs. Duty Ratio

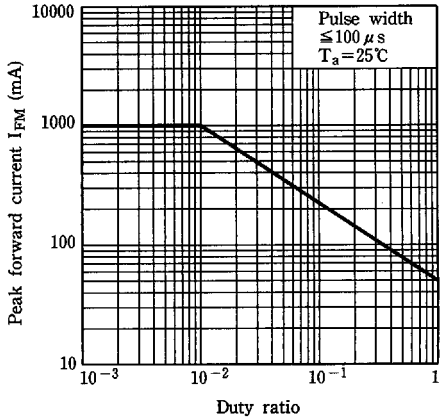


Fig. 3 Spectral Distribution

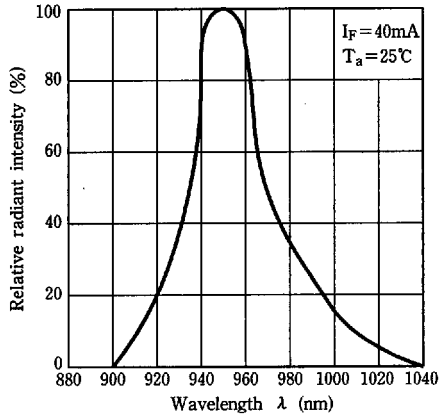


Fig. 4 Peak Emission Wavelength vs. Ambient Temperature

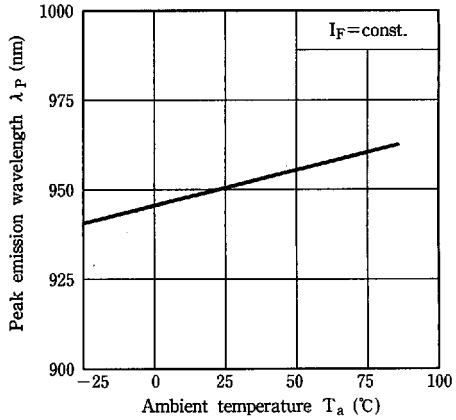


Fig. 5 Forward Current vs. Forward Voltage

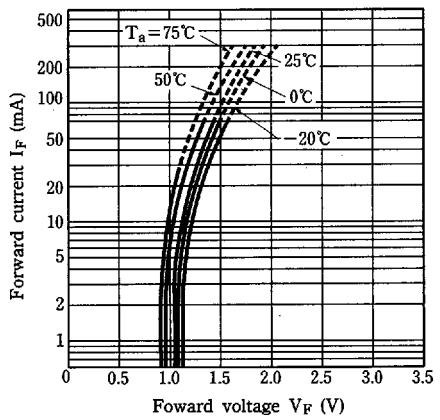


Fig. 6 Relative Radiant Flux vs. Ambient Temperature

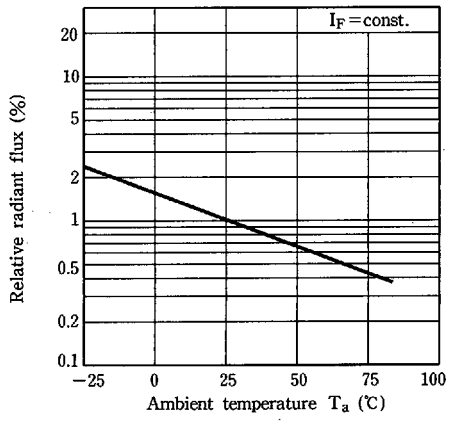


Fig. 7 Radiant Flux vs. Forward Current

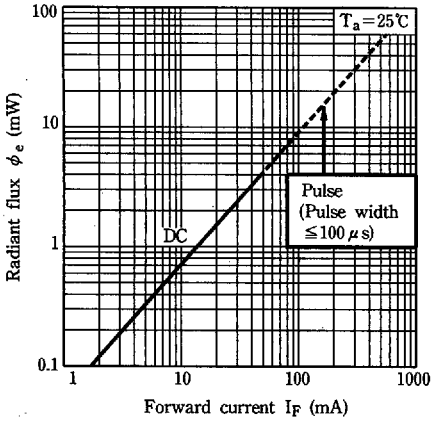


Fig. 8 Relative radiant Intensity vs. Distance (GL371)

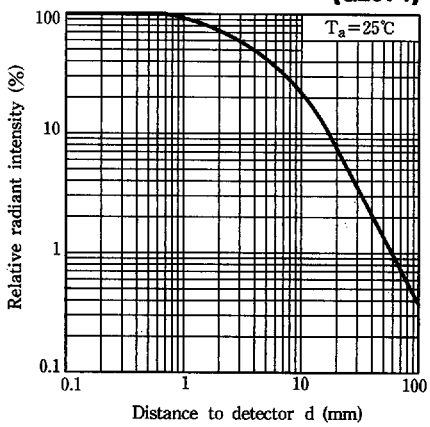


Fig. 9 Radiant Intensity vs. Distance (GL372)

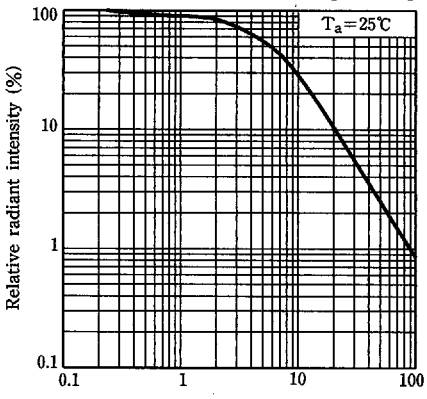


Fig.10 Radiation Diagram (GL371)

(T_a=25℃)

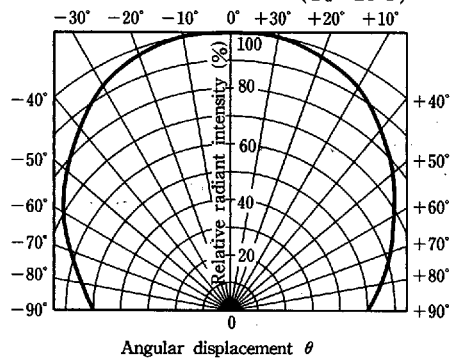
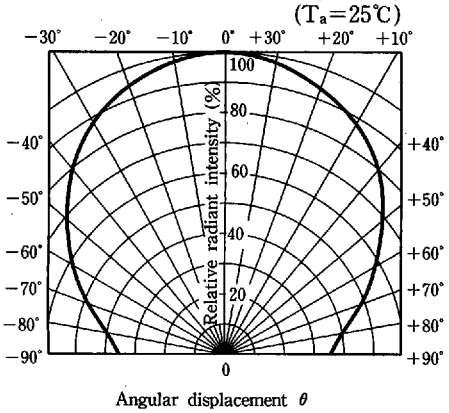


Fig.11 Radiation Diagram (GL372)

(T_a=25℃)



● Please refer to the chapter "Precautions for Use." (Page 78 to 93)