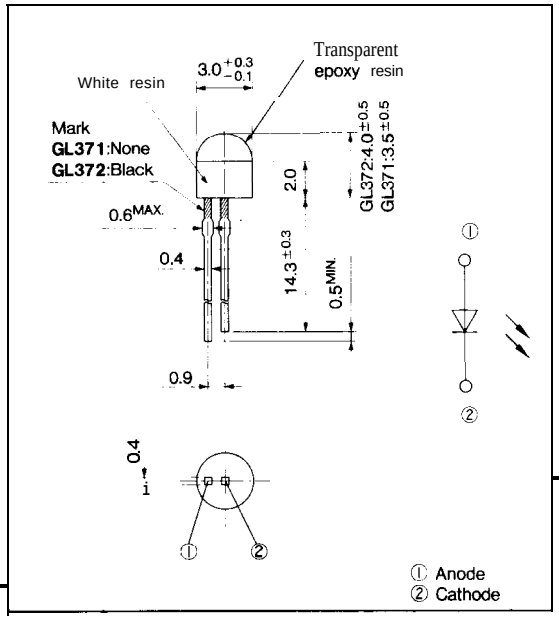
GL371/GL372

Compact **Resin** Stem **Type** Infrared **Emitting Diode**

■ Features

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

■ Outline Dimensions (Unit : mm)



■ Applications

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

■ Absolute **Maximum** Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit
Power dissipation	P	75	mW
Forward current	I_F	50	mA
*1 Peak 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	℃
*2 Soldering 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

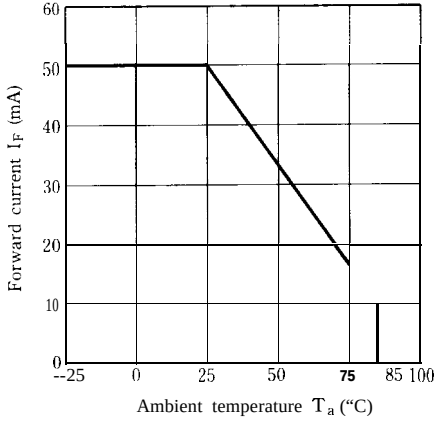


Fig. 2 Peak **Forward Current vs.** Duty Ratio

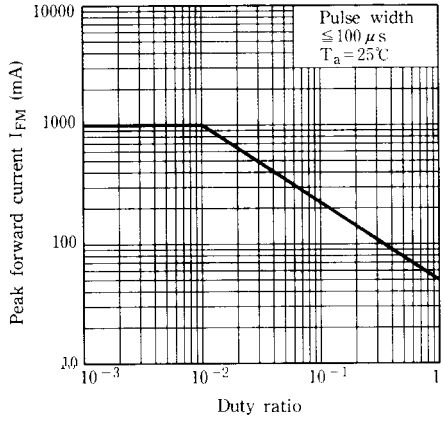


Fig. 3 Spectral Distribution

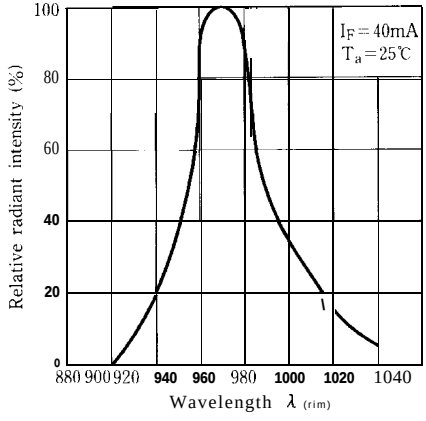


Fig. 4 Peak **Emission Wavelength vs. Ambient** Temperature

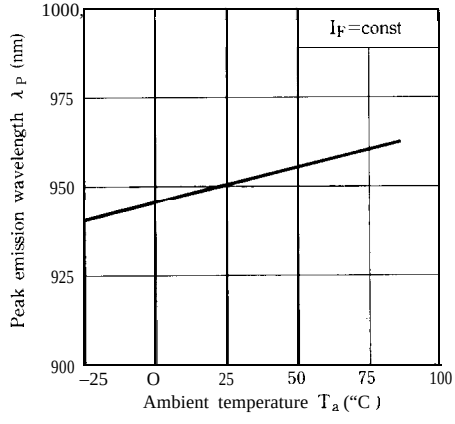


Fig. 5 Forward Current **vs. Forward** Voltage

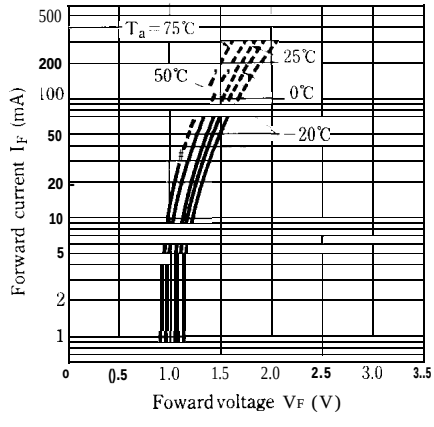


Fig. 6 Relative Radiant Flux vs. Ambient Temperature

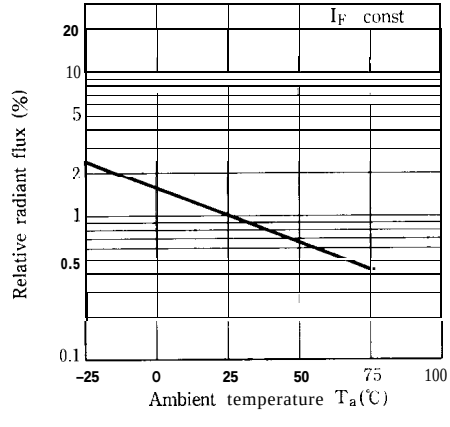


Fig. 7 Radiant Flux vs. Forward Current

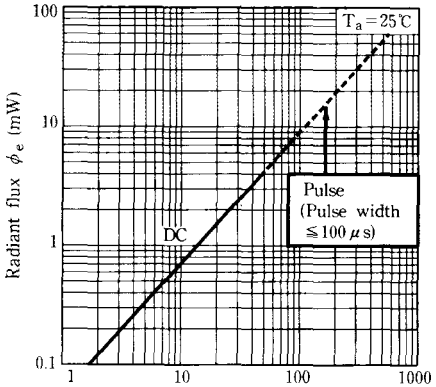


Fig. 8 Relative radiant Intensity vs. Distance (GL371)

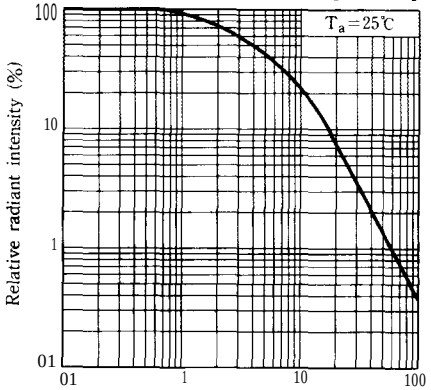


Fig. 9 Radiant Intensity vs. Distance (GL372)

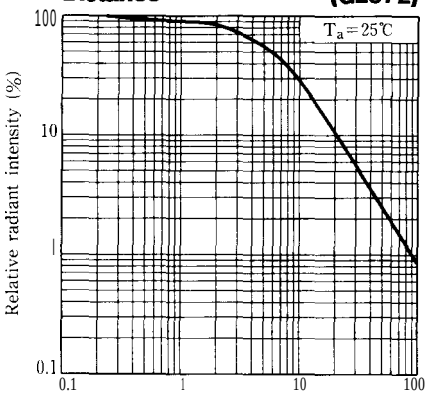


Fig.10 Radiation Diagram (GL371)

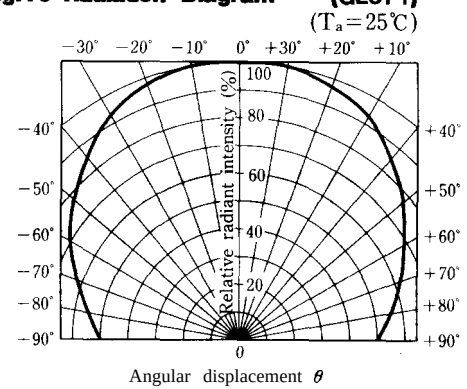
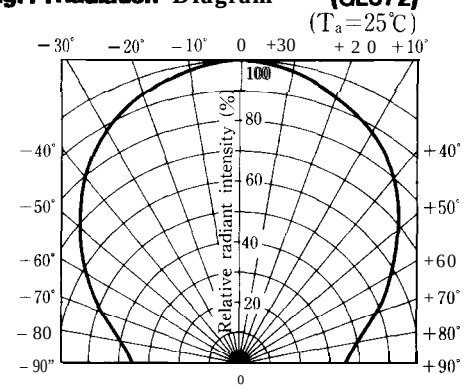


Fig.11 Radiation Diagram (GL372)



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