

# GL360

## $\phi$ 3.2mm Resin Mold Type Infrared **Emitting** Diode

### ■ Features

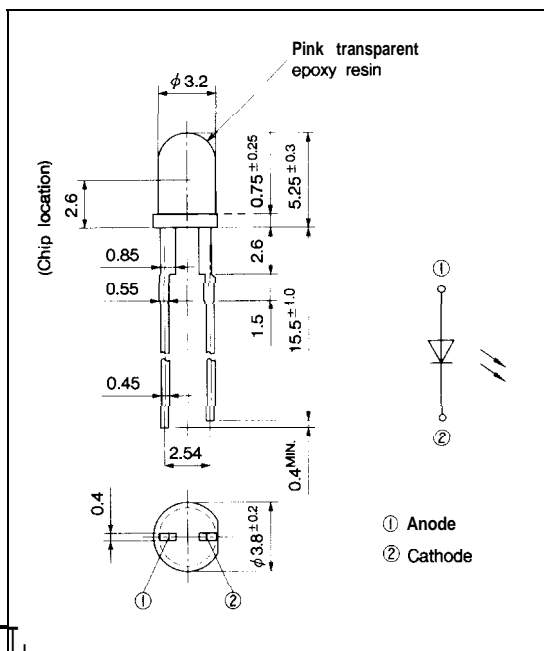
1.  $\phi$  3.2mm epoxy resin package
2. Intermediate beam angle ( $\Delta\theta$ : TYP.  $\pm 20^\circ$ )
3. High output ( $\Phi_e$ : MIN. 1.5mW at  $I_F=40\text{mA}$ )

### ■ Applica-

1. Floppy disk drives
2. Optoelectronic switches
3. Infrared applied systems

### ■ Outline Dimensions

(Unit :mm)



### ■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Power dissipation	P	90	mW
Forward current	$I_F$	60	mA
● 1 Peak forward current	$I_{FM}$	1	A
Reverse voltage	$V_R$	3	V
Operating temperature	$T_{opr}$	-25 to +85	°C
Storage temperature	$T_{stg}$	-40 to +85	°C
*2 Soldering temperature	$T_{sol}$	260	°C

\*1 Pulse width  $\leq 100 \mu\text{s}$ , Duty ratio = 0.01

\*2 For 5 wends at the position of 2.6mm from the bottom face of resin package

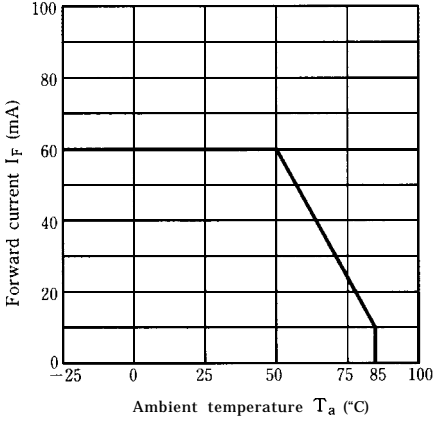
### ■ Electro-optical Characteristics

(Ta = 25°C)

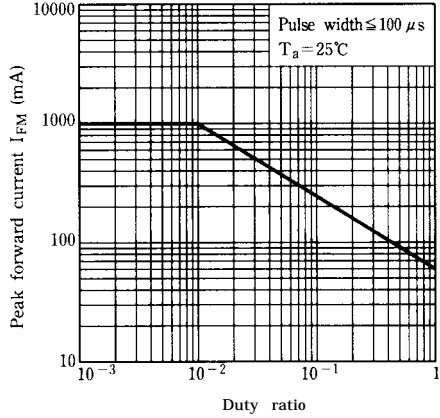
Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	$V_F$	$I_F=40\text{mA}$	—	1.3	1.5	V
Peak forward voltage	$V_{FM}$	$I_{FM}=0.5\text{A}$	—	2.2	3.5	v
Reverse current	$I_R$	$V_R=3\text{V}$	—	—	10	$\mu\text{A}$
Terminal capacitance	$C_t$	$V_R=0, f=1\text{MHz}$	—	70	—	pF
*Radiant intensity	$I_E$	$I_F=40\text{mA}$	2.5	5.0	10.0	mW/sr
Radiant flux	$\Phi_e$	$I_F=40\text{mA}$	1.5	2.4	—	mW
Peak emission wavelength	$\lambda_p$	$I_F=40\text{mA}$	—	950	—	nm
Half intensity wavelength	$\Delta\lambda$	$I_F=40\text{mA}$	—	45	—	nm

\*3  $I_E$  : Value obtained by converting the value in power of radiant flux emitted at the solid angle of 0.01 sr (steradian) in the direction of mechanical axis of the lense portion into 1 sr of all those emitted from the light emitting diode.

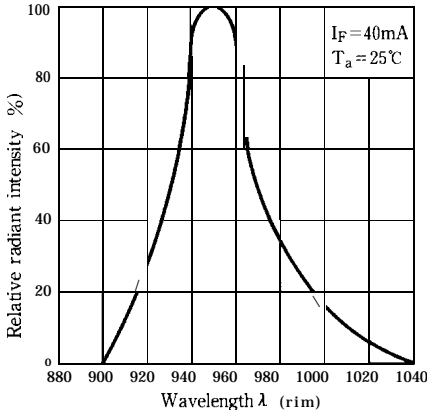
**Fig. 1 Forward Current vs. Ambient Temperature**



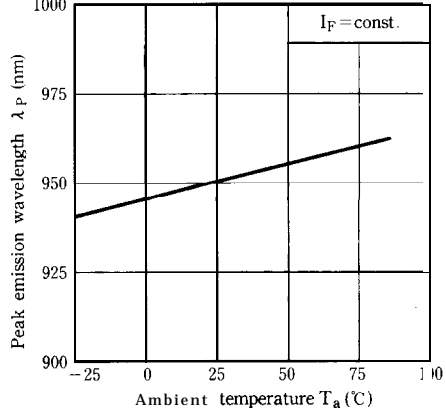
**Fig. 2 Peak Forward Current vs. Duty Ratio**



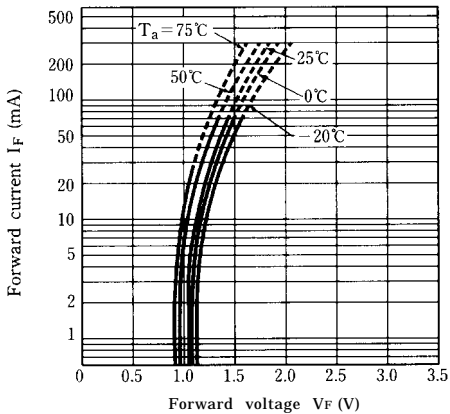
**Fig. 3 Spectral Distribution**



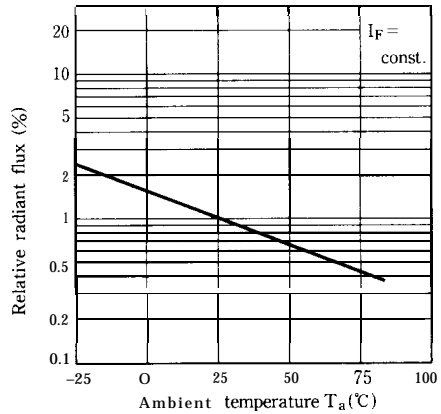
**Fig. 4 Peak Emission Wavelength vs. Ambient Temperature**



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



**Fig. 6 Relative Radiant Flux vs. Ambient Temperature**



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 Infrared Emitting Diodes