GL460/GL461

Double Ended Mold Type Infrared Emitting Diode

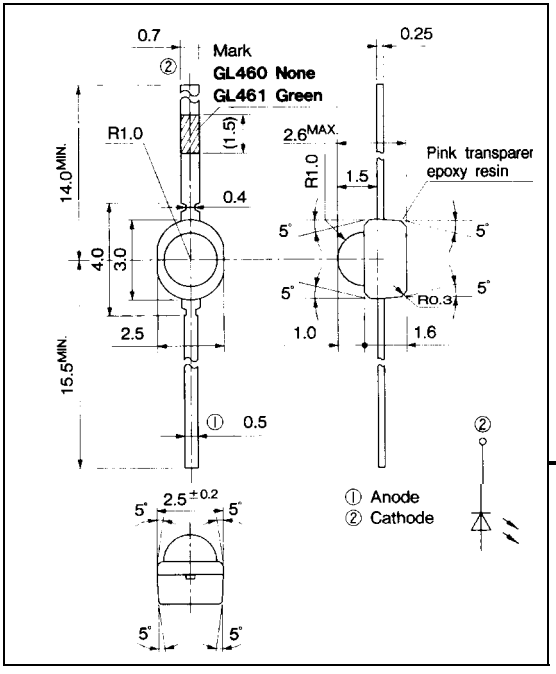
■ Features

1. Small double-end type package (packaging area: 37% smaller than **GL480**)
2. High output power type (**GL461**)
3. Taped models 2,000 pcs/reel (**GL460T**/ **GL461T**)

■ Applications

1. Floppy disk drives
2. VCRs
3. Audio equipment

■ Outline Dimensions (Unit : mm)



■ Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	Unit
Power dissipation	P	150	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}	−40 to +85	℃
*2 Soldering temperature	T_{sol}	260	℃

*1 Pulse width ≦ 100 μs, Duty ratio = 0.01
*2 For MAX. 3 seconds at the position of 2.5mm from the bottom face of resin package.

■ Electro-optical Characteristics (Ta=25℃)

Parameter		Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage		V_F	IF= 20mA	−	1.2	1.5	V
Peak forward voltage		V_{FM}	I_{FM} = 0.5A	−	2.2	4.0	V
Reverse current		I_R	V_R=3V	−	−	10	μA
Terminal capacitance		C_t	V_R=0V, f=1MHz	−	20	−	pF
Response frequency		f_c	−	−	300	−	kHz
Radiant flux	GL460	Φe	I_F=20mA	1.0	−	4.0	mW
	GL461			1.8	−	7.2	
Peak emission wavelength		λP	IF= 5mA	−	950	−	nm
Half intensity wavelength		Δλ	IF= 5mA	−	45	−	nm
Half intensity angle		Δθ	IF= 20mA		±40	−	

Fig. 1 Forward Current vs. Ambient Temperature

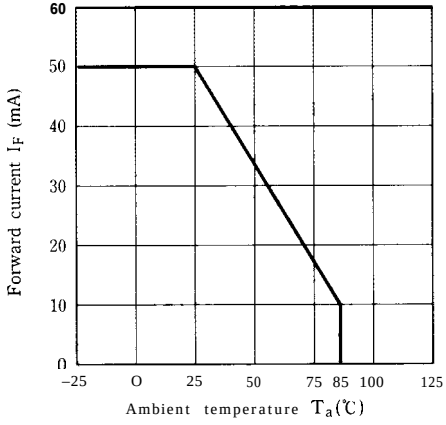


Fig. 2 Peak Forward Current vs. Duty Ratio

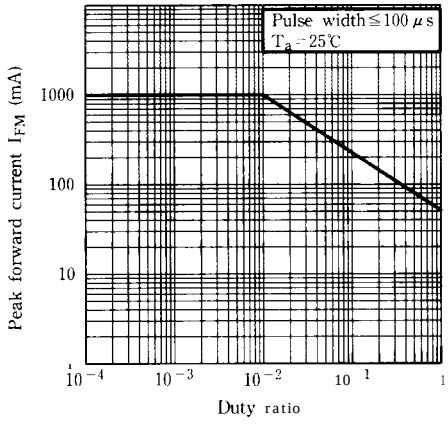


Fig. 3-a Spectral Distribution (GL460)

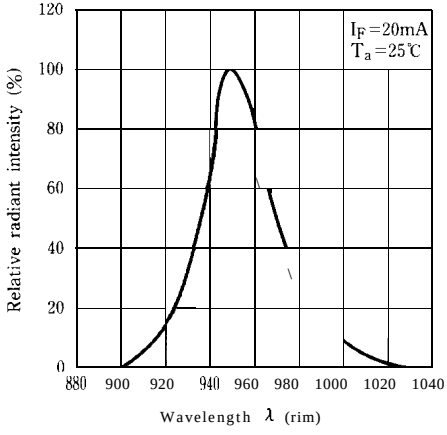


Fig. 3-b Spectral Distribution (GL461)

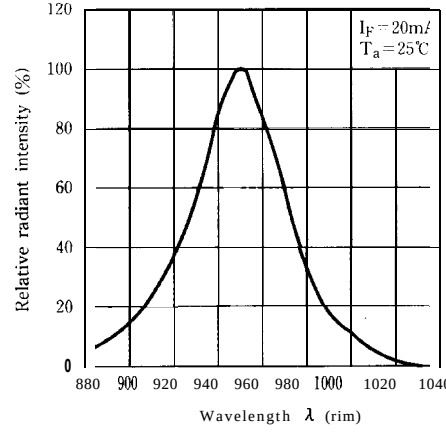


Fig. 4 Peak Emission Wavelength vs. Ambient Temperature

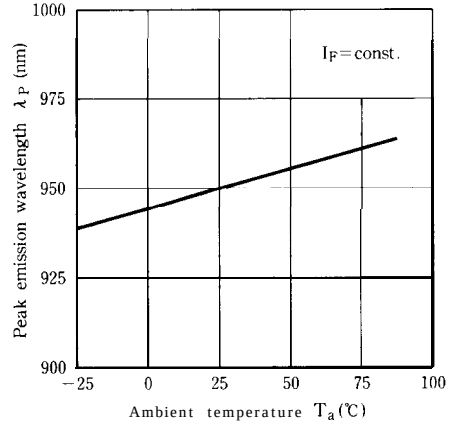


Fig. 5 **Forward Current vs.** Forward **Voltage**

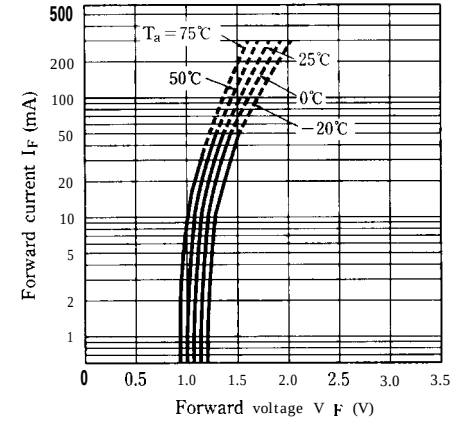


Fig. 6 Relative Radiant Flux vs. Ambient Temperature

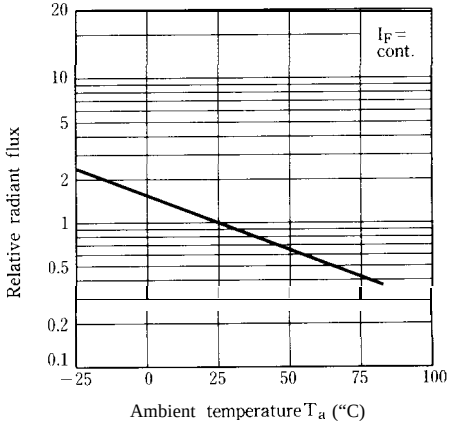


Fig. 7 Radiant **Flux** we. Forward **Current**

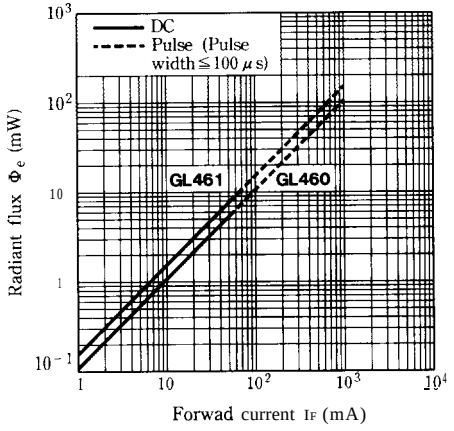


Fig. 8 Relative **Collector Current vs. Distance** (Detector : **PT460)**

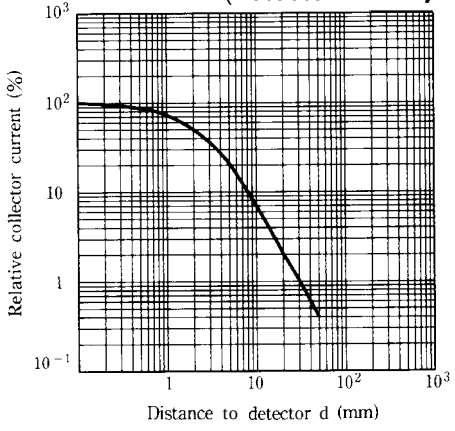
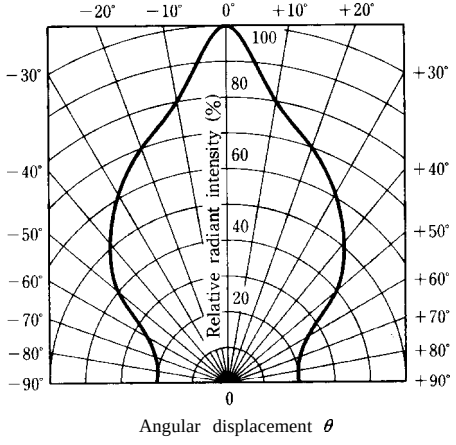
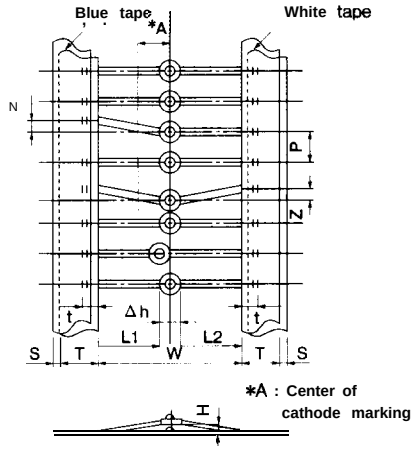


Fig. 9 Radiation **Diagram**



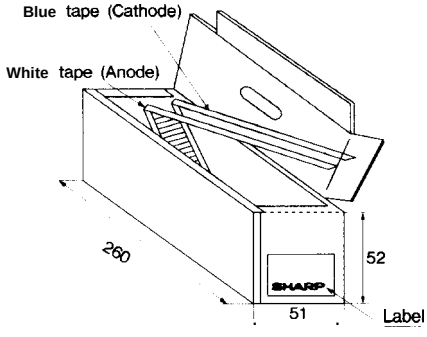
■ Taping Specifications (GL460T/GL461T)



W	(Note 1) p	L2-L1	T	Z	Δh	S	(Note 2) t	H	A
$26^{+1.5}_{-0.0}$	$5^{+0.5}_{-0.5}$	–	6^{+10}_{-10}	1.2 MAX	0.5 MAX	0.8 MAX	0.5 MIN	2.5 MAX	(4.5)

(Note 1) Tolerance of 20 pitches is ± 2mm.
(Note 2) The lead's overlapping length on the tape.

■ Packing Specification (GL460T/GL461T)



(1) Packing form
Box type
a) The tape is zigzag-folded with 50 PCS. of IR LEDs per fold.
b) IR LED inserting portions for 50 to 60 PCS. on the tape's starting and ending parts are not stuffed.
c) For the taping of cathode pin, blue tape is used, and for anode pin, white tape in used
(2) Packing quantity
2 000 PCS. per box

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