

GL4600/GL4610

Double-End Type Infrared Emitting Diode

■ Features

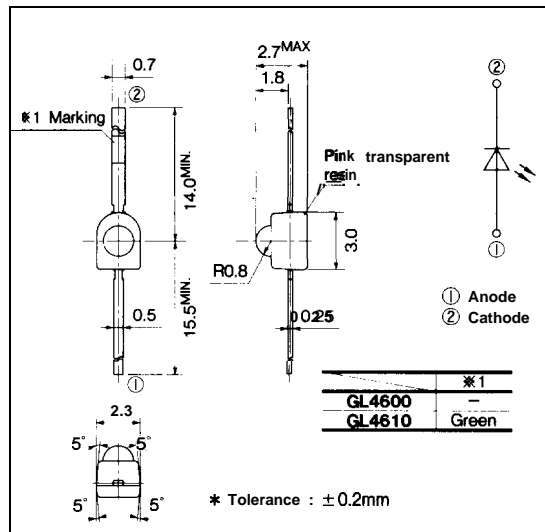
1. Small double-end type package
(Mounting area : 37% smaller than **GL480**)
2. Narrow beam angle
($\Delta\theta$: TYP. $\pm 13^\circ$,
Radiation intensity :3 times higher
than **GL460**)
3. High output type (**GL4610**)
4. Tape-packaged models are also available
(2 000pcs./reel)

■ Applications

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

■ Outline Dimensions

(Unit :mm)



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Infrared Emitting Diodes

■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Forward current	I_F	1 5 0	mA
*1 Peak forward current	I_{FM}	1	A
Reverse voltage	V_R	6	v
Power dissipation	P	150	mW
Operating temperature	T_{opr}	-20 to +85	°C
Storage temperature	T_{stg}	-40 to +85	°C
*Soldering temperature	T_{sol}	260	°C

*1 Pulse width : 100 μs , duty ratio : 0.01

*2 For 3 seconds at the position of 2.5mm from the bottom face of resin package

■ **Electro-optical Characteristics**

($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	$I_F = 20\text{mA}$	-	1.2	1.5	v
Peak forward voltage	V_{FM}	$I_{FM} = 0.5\text{A}$	-	2.2	4.0	v
Reverse current	I_R	$V_R = 3\text{V}$	-	-	10	μA
Terminal capacitance	C_t	$V_R = 0, F = 1\text{MHz}$	-	15	-	pF
Response frequency	f_c			300	-	kHz
Radiant flux	GL4600	$I_F = 20\text{mA}$	1.0	-	4.0	mW
	GL4610		1.8	-	7.2	
Peak emission wavelength	λ_p	$I_F = 5\text{mA}$		950	-	nm
Spectrum radiation bandwidth	$\Delta\lambda$	$I_F = 5\text{mA}$		45	-	nm
Half intensity angle	$\Delta\theta$	$I_F = 20\text{mA}$	-	± 13	-	$^\circ$

Fig. 1 Forward Current vs. Ambient Temperature

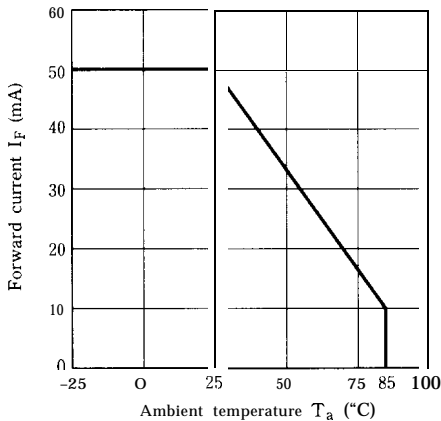
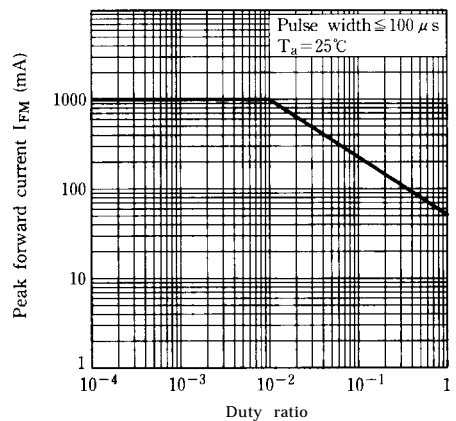


Fig. 2 Peak Forward Current vs. Duty Ratio



● Please refer to the chapter “Precautions for Use” (Page 78 to 93)