GL480/GL480Q GL483Q

Infrared Emitting Diode

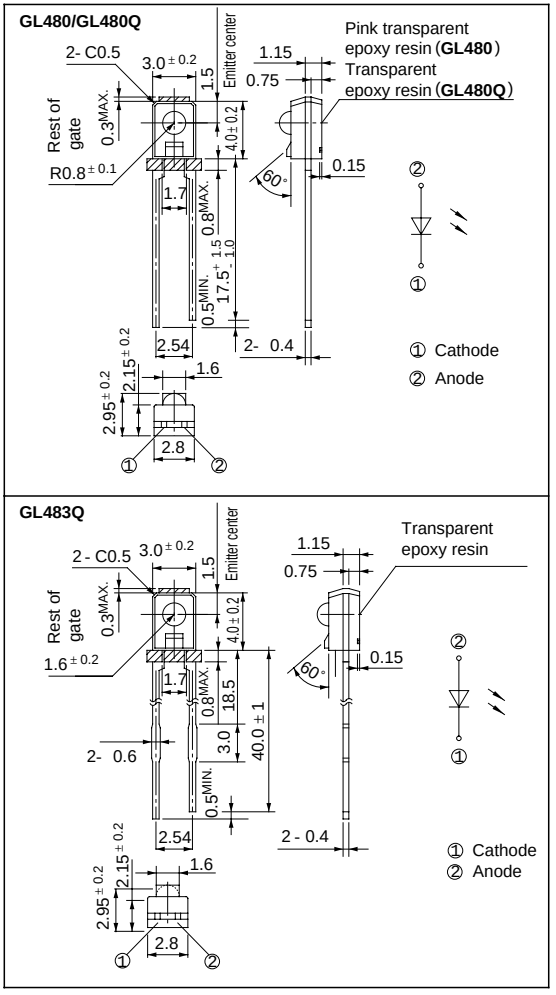
■ Features

1. Narrow beam angle (Δθ : TYP. ± 13˚)
2. Radiant flux (Φ e : MIN. 0.7mW at I_F = 20mA)
3. Compact, high reliability by chip coating **(GL480Q/GL483Q)**
4. Long lead type (**GL483Q**)

■ Applications

1. Copiers
2. Floppy disk drives
3. Optoelectronic switches

■ Outline Dimensions (Unit : mm)



■ Absolute Maximum Ratings (Ta= 25˚C)

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	˚C
Storage temperature	T_{stg}	- 40 to + 85	˚C
*2Soldering temperature	T_{sol}	260	˚C

*1 Pulse width<=100 μ s, Duty ratio = 0.01
*2 For 3 seconds at the position of 1.4mm 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 = 20mA	-	1.2	1.4	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
Response frequency	f_c	-	-	300	-	kHz
Radiant flux	Φe	I_F = 20mA	0.7	-	3.0	mW
Peak emission wavelength	λp	I_F = 5mA	-	950	-	nm
Half intensity wavelength	Δλ	I_F = 5mA	-	45	-	nm
Half intensity angle	Δθ	I_F = 20mA	-	± 13	-	˚

Fig. 1 Forward Current vs. Ambient Temperature

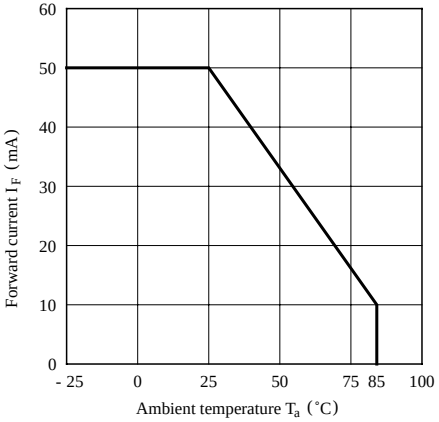


Fig. 2 Peak Forward Current vs. Duty Ratio

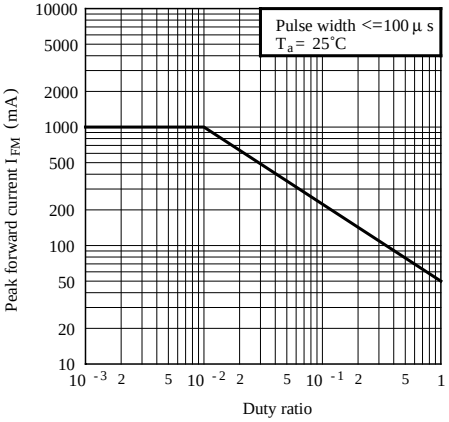


Fig. 3 Spectral Distribution

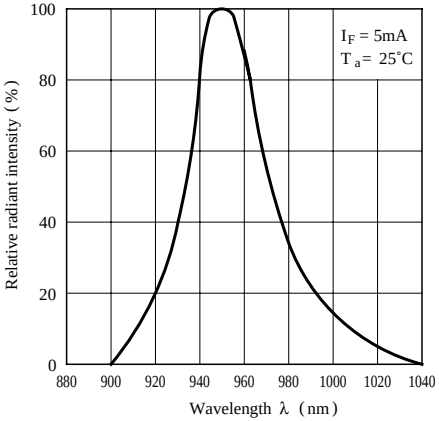


Fig. 4 Peak Emission Wavelength vs. Ambient Temperature

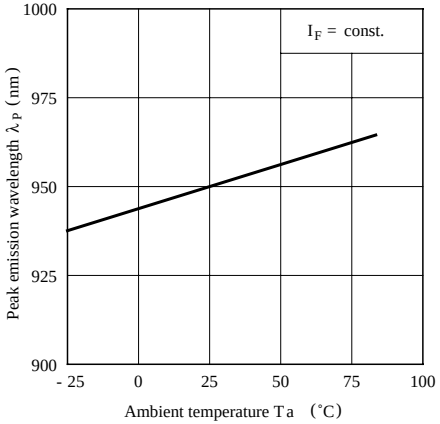


Fig. 5 Forward Current vs. Forward Voltage

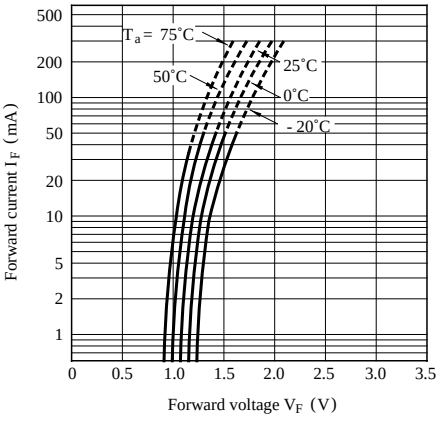


Fig. 6 Relative Radiant Flux vs. Ambient Temperature

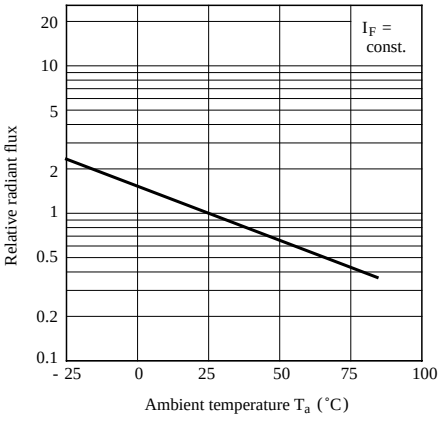


Fig. 7 Radiant Flux vs. Forward Current

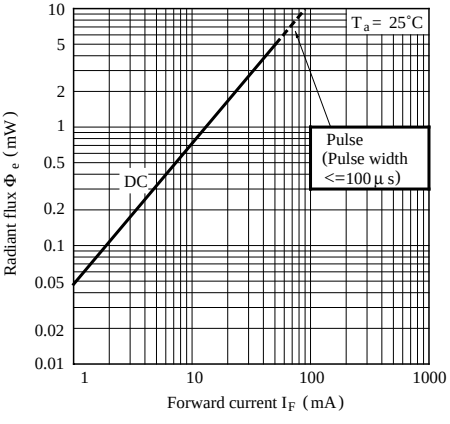


Fig. 8 Relative Radiant Intensity vs. Distance

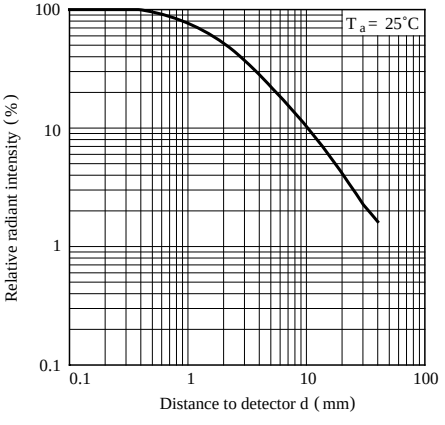


Fig. 9 Relative Collector Current vs. Distance (Detector : PT480)

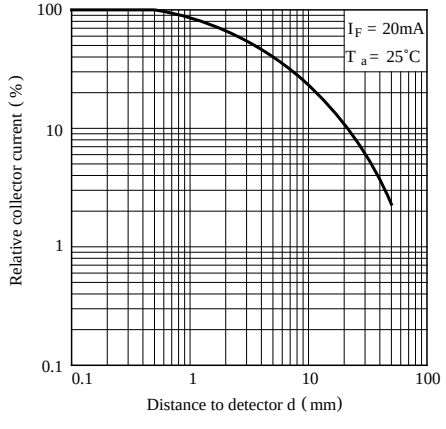


Fig.10 Radiation Diagram (GL480Q/GL483Q)

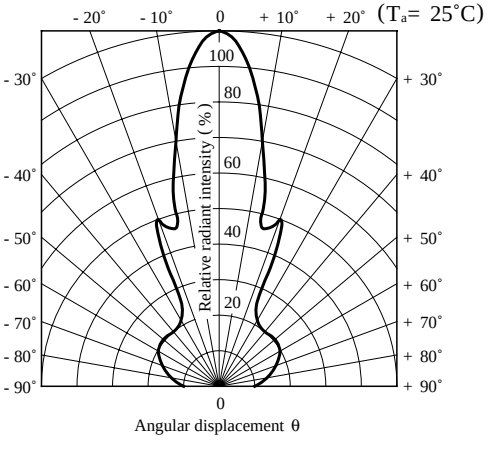
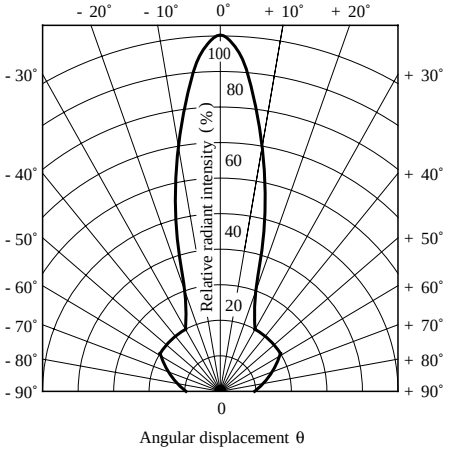


Fig.11 Radiation Diagram (GL480) (Ta = 25˚C)



● Please refer to the chapter " Precautions for Use."

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