GL533

High Output Infrared Emitting Diode for Camera AF

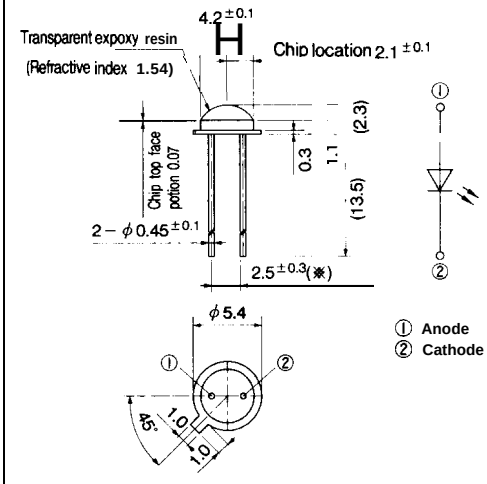
■ Features

1. Small diameter of emission spot
   (TYP : ϕ0.6mm)
2. High-precision positioning light axis
   (Positioning accuracy : ±0.1mm)
3. High output type
   (Φe : TYP. 13mW at I_F=50mA)
4. Low peak forward voltage
   (V_{FM} : TYP. 2.0V at I_{FM}=0.5A)
5. Equivalent to peak sensitivity wavelength of PSD
   (Peak emission wavelength : TYP. 940nm)

■ Application

1. Cameras

■ Outline Dimensions (Unit : mm)

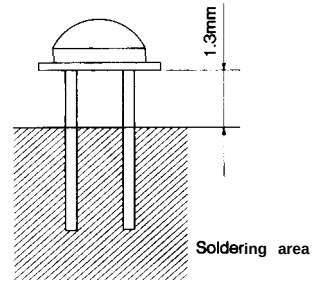


✱ The dimensions indicated by ✱ refer to those measured from the lead base.
✱ ( ) : Reference dimension

■ Absolute Maximum Ratings (Ta=25℃)

Parameter	Symbol	Rating	unit
Forward current	I_F	80	mA
✱1 Peak forward current	I_{FM}	1	A
Reverse voltage	V_R	6	V
Power dissipation	P	120	mW
Operating temperature	T_{opr}	−25 to +100	℃
Storage temperature	T_{stg}	−30 to +100	℃
✱2 Soldering temperture	T_{sol}	260	℃

✱1 Pulse width 100 μs, duty ratio : 0.01
✱2 For MAX. 3 seconds from the bottom face of package



■ Electro-optical Characteristics (Ta= 25℃)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
Forward voltage	V_F	I_F=50mA	–	1.3	1.6	V
Peak forward voltage	V_{FM}	I_{FM}=0.5A		2.0	2,9	v
Reverse current	I_R	V_R=3V	–		10	μA
Radiant flux	Φe	I_F=50mA	8	13	18	mW
Peak emission wavelength	λp	I_F=20mA	–	940	–	nm
Spectrum radiation bandwidth	Δλ	I_F= 20mA	–	60	–	nm
Terminal capacitance	Ct	V_R=0, f=1 MHz		70	–	pF
Response frequency	fc		–	300	–	kHz

Fig. 1 Forward Current vs. Ambient Temperature

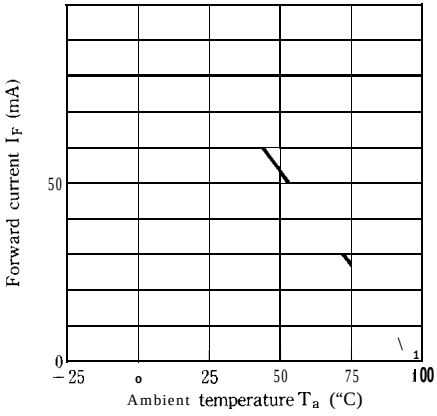
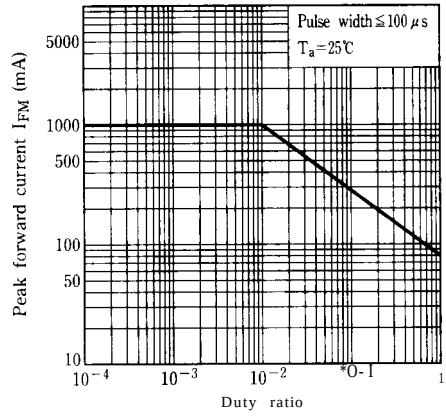


Fig. 2 Peak **Forward Current vs. Duty Ratio**



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