

## Point Source LED

### Features:

- High Output Power
- Parallel Rays (Super Excellent)
- Narrow Beam (Super Excellent)
- Low Temperature Coefficient of PO

### Applications:

- Optical Switches
- Linear & Rotary Encoder

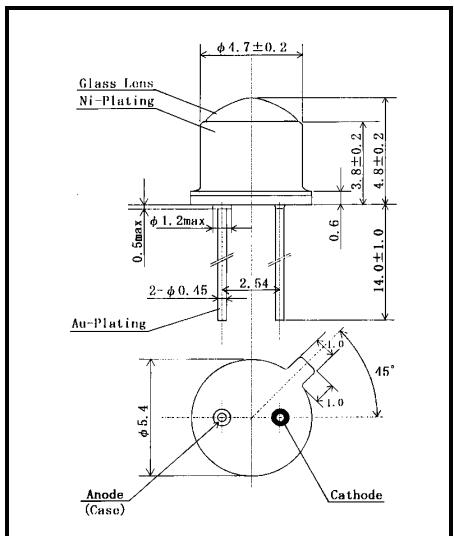


## Absolute Maximum Ratings (Ta=25°C)

Items	Symbol	Ratings	Unit
Forward Current (DC)	IF	100	mA
Forward Current (Pulse)*1	IFP	0.8	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	180	mW
Operating Temperature	Topr	-30 ~ +100	°C
Storage Temperature	Tstg	-40 ~ +125	°C
Junction Temperature	Tj	125	°C
Lead Soldering Temp*2	Tls	260	°C

\*1:Tw=10μS, T=10mS

\*2:Time 5 Sec max, Position: Up to 3mm from the body.



Dimensions (Unit:mm)

## Electrical & Optical Characteristics ( $T_a = 25^\circ C$ )

Items	Symbol	Conditions	Min	Typ	Max	Unit
Power Output	PO	IF=50mA	1.6	2.2	--	mW
Forward Voltage	VF	IF=50mA	--	1.45	1.8	V
Reverse Current	IR	VR=5V	--	--	10	$\mu A$
Peak Wavelength	$\lambda_p$	IF=50mA	850	880	--	nm
Spectral Line Half Width	$\Delta \lambda$	IF=50mA	--	45	--	nm
Half Intensity Beam Angle	$\theta$	IF=50mA	--	$\pm 5$	--	deg.
Cut-off Frequency	fc	IFP=50mA+20mA $p-p$	--	6	--	MHz
Junction Capacitance	Cj	1MHz, V=0V	--	65	--	pF
Temp. Coefficient of PO	P/T	IF=10mA	--	-0.05	--	%/ $^\circ C$
Temp Coefficient of VF	V/T	IF=10mA	--	-1.6	--	mV/ $^\circ C$

## Graphs:

