

Visible Light Emitting Diode

Features:

- High Output Power
- High Reliability in Demanding Environments
- Parallel Rays

Applications:

- Linear and Rotary Encoder
- Optical Switches

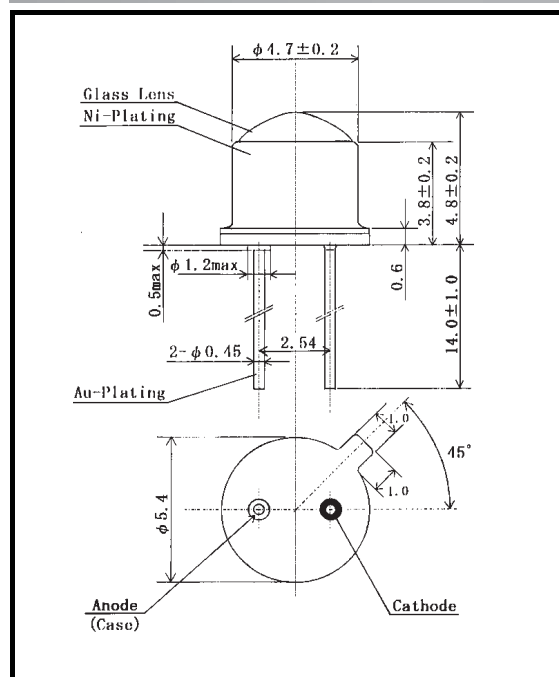


Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Ratings	Unit
Forward Current (DC)	IF	50	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	130	mW
Operating Temperature	Topr	-20 ~ +100	°C
Storage Temperature	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temperature*2	Tls	260	°C

*1: Tw=10μs, T=10ms

*2: Time 5 Sec. Max, Positions: Up to 3mm from the body



Dimensions (Unit:mm)

Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Conditions	Min	Typ	Max	Unit
Power Output	PO	IF=20mA	1.5	3.0	--	mW
Forward Voltage	VF	IF=20mA	--	1.8	2.2	V
Reverse Current	IR	VR=5V	--	--	100	μA
Peak Wavelength	λ_p	IF=20mA	--	660	--	nm
Spectral Line Half Width	$\Delta\lambda$	IF=20mA	--	25	--	nm
Half Intensity Beam Angle	θ	IF=20mA	--	±4	--	deg.
Rise Time	Tr	IFP=20mA	--	30	--	ns
Fall Time	Tf	IFP=20mA	--	30	--	ns
Junction Capacitance	Cj	1MHz, V=0V	--	20	--	pF
Temp. Coefficient of PO	P/T	IF=10mA	--	-0.5	--	%/°C
Temp Coefficient of VF	V/T	IF=10mA	--	-1.5	--	mV/°C

Graphs:

