

Infrared Emitter

Features:

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

Applications:

- Optical Switches
- Linear Rotary Encoder

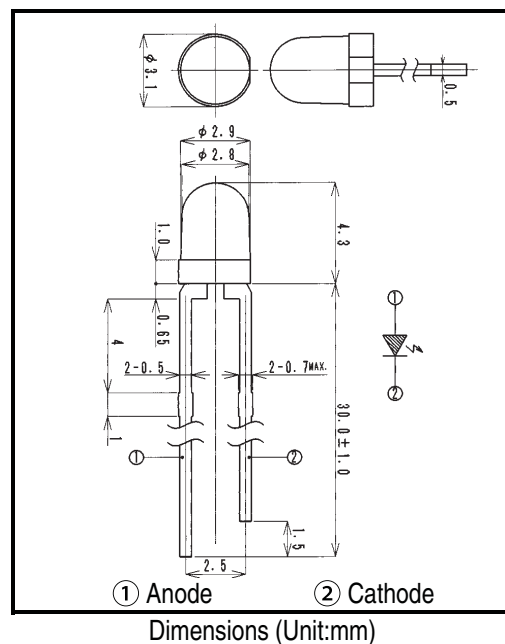


Absolute Maximum Ratings (Ta=25°C)

Items	Symbol	Ratings	Unit
Forward Current (DC)	IF	60	mA
Forward Current (Pulse)*1	IFP	0.5	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	100	mW
Operating Temperature	Topr	-20 ~ +85	°C
Storage Temperature	Tstg	-30 ~ +100	°C
Junction Temperature	Tj	100	°C
Lead Soldering Temp*2	Tsol	260	°C

*1: Tw=10μs, T=10ms

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



Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Conditions	Min	Typ	Max	Unit
Power Output	PO	IF=20mA	--	5.0	--	mW
Forward Voltage	VF	IF=20mA	--	1.3	1.6	V
Reverse Current	IR	VR=5V	--	--	10	μA
Peak Wavelength	λ_p	IF=20mA	--	880	--	nm
Spectral Line Half Width	$\Delta \lambda$	IF=20mA	--	60	--	nm
Half Intensity Beam Angle	θ	IF=20mA	--	±25	--	deg.
Rise Time	Tr	IFP=50mA	--	1.5	--	μs
Fall Time	Tf	IFP=50mA	--	0.8	--	μs
Junction Capacitance	Cj	1MHz, V=0V	--	15	--	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:

