

Infrared Emitting Diode

Features:

- High Output Power
- Narrow Beam Angle
- High Reliability

Applications:

- Optical Switches
- Bar-Code Reader

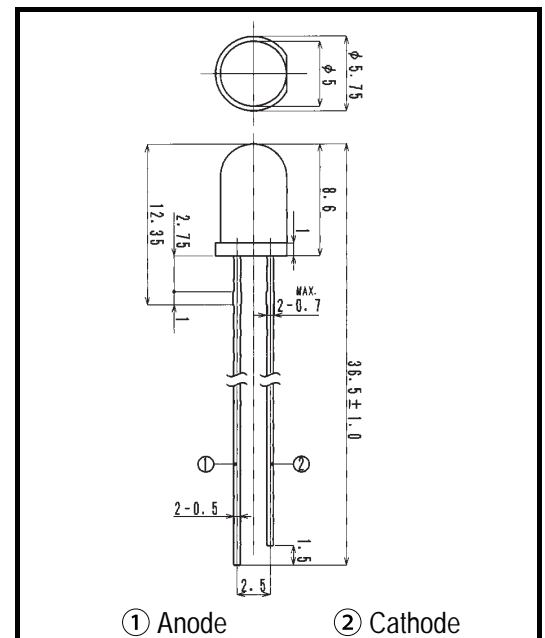


Absolute Maximum Ratings (Ta=25°C)

Items	Symbol	Ratings	Unit
Forward Current (DC)	IF	100	mA
Forward Current (Pulse) ^{*1}	IFP	1	A
Reverse Voltage	VR	5	V
Power Dissipation	PD	180	mW
Operating Temperature	Topr	-20 ~ +80	°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



① Anode ② Cathode

Dimensions (Unit:mm)

Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Conditions	Min	Typ	Max	Unit
Power Output	PO	IF=50mA	--	11	--	mW
Forward Voltage	VF	IF=50mA	--	1.45	1.8	V
Reverse Current	IR	VR=5V	--	--	10	μA
Peak Wavelength	λp	IF=50mA	--	880	--	nm
Spectral Line Half Width	Δλ	IF=50mA	--	60	--	nm
Half Intensity Beam Angle	θ	IF=50mA	--	±12	--	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:

