

Peak Emission Wavelength 755 nm, Radiant Flux 4 mW (CW)**■ FEATURES**

- Radiant flux (CW) : 4 mW
- Peak Emission Wavelength : 755 nm \pm 5 nm
- Emitting Area Size : 5 μ m x 1 μ m
- High Stability
- Long life
- Compact

■ APPLICATIONS

- Printing
- Measuring Instrument
- Medical Instrument

**■ ABSOLUTE MAXIMUM RATINGS (Top(c) = 38 °C)**

Parameter	Symbol	Value	Unit
Radiant Flux	Φ_e	6	mW
Reverse Voltage (LD)	V_{rl}	2	V
Reverse Voltage (PD)	V_{rd}	20	V
Operating Temperature	$T_{op(c)}$	-10 to +70	°C
Storage Temperature	T_{stg}	-20 to +80	°C

■ CHARACTERISTICS (Top(c) = 38 °C)

Parameter	Symbol	Conditions	Value			Unit
			Min.	Typ.	Max.	
Operating Current	I_{op}	$\Phi_e = 4$ mW	30	57	76	mA
Peak Emission Wavelength	λ_p		750	755	760	nm
Forward Voltage	V_f		1.6	1.9	2.2	V
Beam Spread Angle	Horizontal	$\Phi_e = 4$ mW FWHM	5	7	10	degree
	Vertical		θ_{\perp}	31	36	41
Lasing Threshold Current	I_{th}	—	15	35	50	mA
Monitor PD Current	I_m	$\Phi_e = 4$ mW, $V_{rd} = 15$ V	0.5	1.5	3.5	mA
PD Cutoff Frequency	f_c	$V_{rd} = 15$ V (-3dB)	30	50	-	MHz

CW LASER DIODES L7910

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Figure 1: Radiant Flux vs. Operating Current (Typ.)

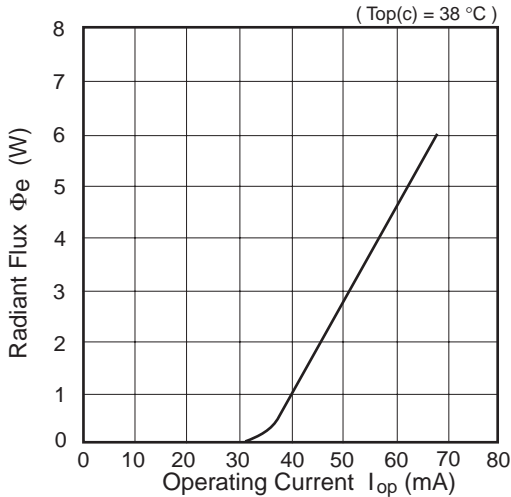


Figure 2: Radiant Flux vs. Monitor Current (Typ.)

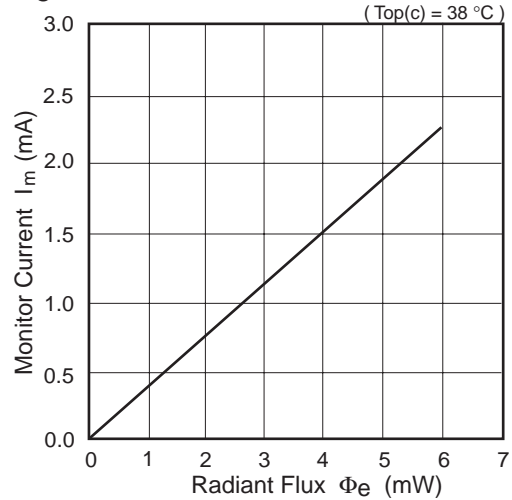


Figure 3-1: Directivity (Parallel Direction) (*Example from Measurement)

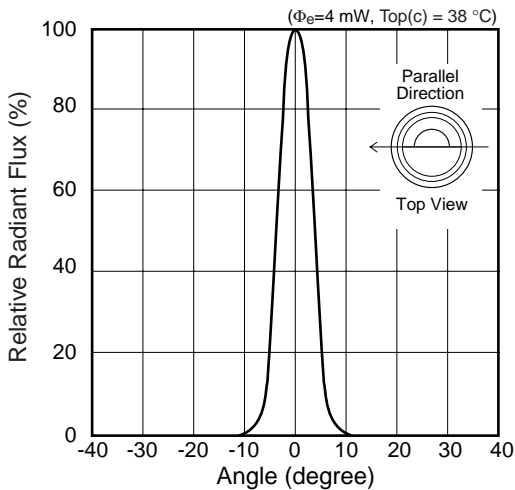


Figure 3-2: Directivity (Vertical Direction) (*Example from Measurement)

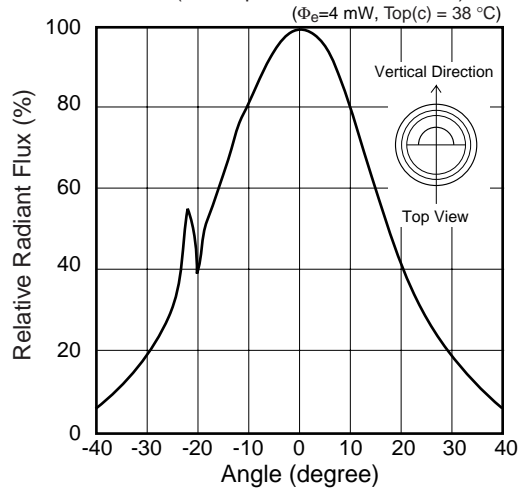
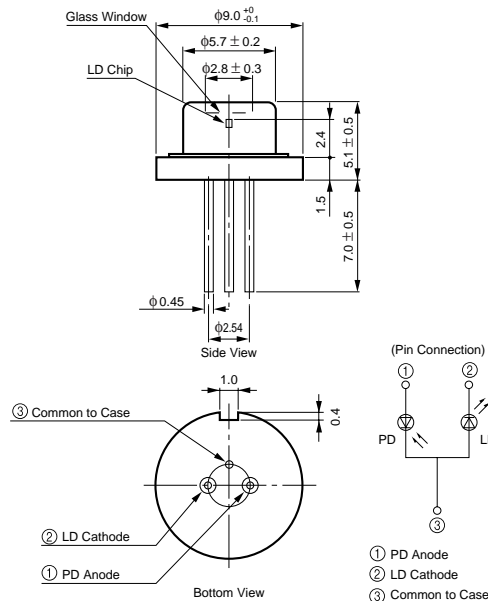


Figure 4: Dimensional Outline (Unit: mm)



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