

**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  $\mu$ m x 1  $\mu$ 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	$\Phi_e$	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	$\lambda_p$		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		$\theta_{\perp}$	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.)

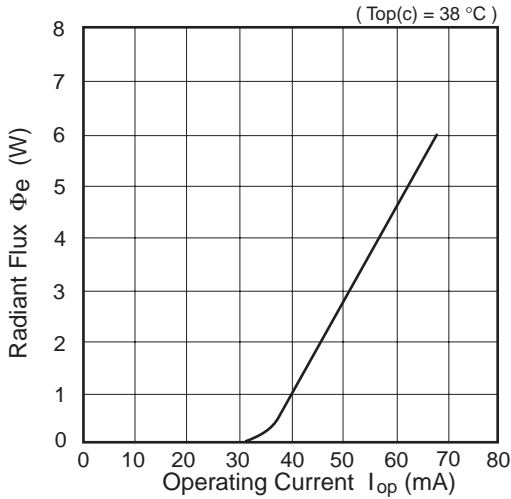


Figure 2: Radiant Flux vs. Monitor Current (Typ.)

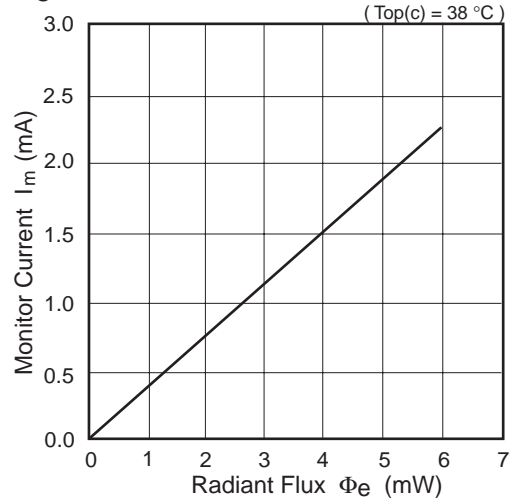


Figure 3-1: Directivity (Parallel Direction)  
(\*Example from Measurement)

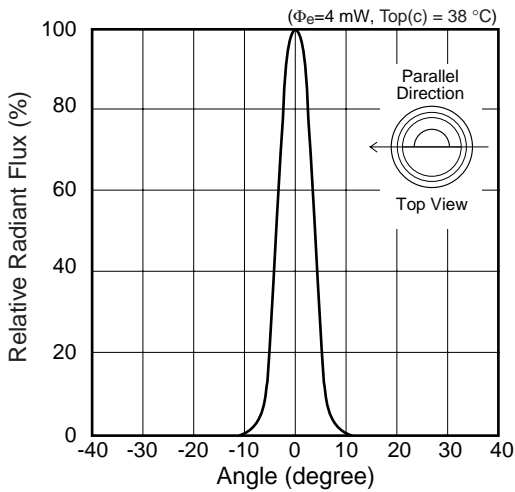


Figure 3-2: Directivity (Vertical Direction)  
(\*Example from Measurement)

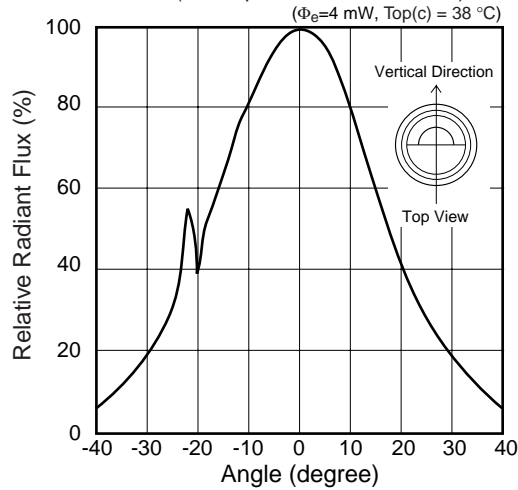
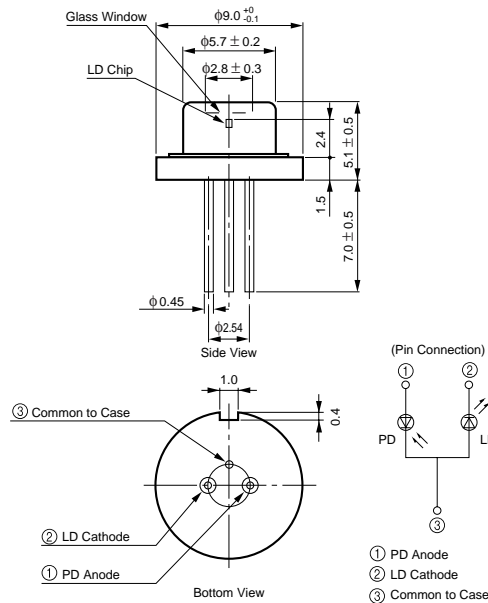


Figure 4: Dimensional Outline (Unit: mm)



**HAMAMATSU**

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