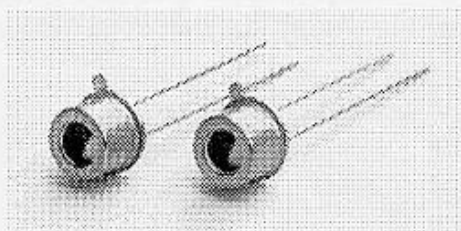


■ Applications

Laser Radar
Range Finder
Excitation Light Source



■ ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

Characteristics	Symbols	Ratings	Units
Pulsed Forward Current	I _{fp}	10	A
Reverse Voltage	V _r	2	V
Pulsed Radiant Output Power	P _o	7	W
Pulse Duration	T _w	100	ns
Duty Ratio	DR	0.075	%
Operating Temperature	T _{op}	-35 to +80	°C
Storage Temperature	T _{stg}	-40 to +125	°C

■ CHARACTERISTICS (Tc=25°C)

Characteristics	Symbols	Test Conditions	Min.	Typ.	Max.	Units
Pulsed Radiant Power		I _{fp} =5A	4	5		W
Peak Emission Wavelength	λ_p		850	860	870	nm
Spectral Radiation Bandwidth	$\Delta\lambda$	FWHM	-	4	-	nm
Forward Voltage	V _f	I _{fp} =5A		4		V
Rise Time	t _r				0.5	ns
Beam Spread Angle	Parallel	I _{fp} =5A	6	10	14	deg
	Vertical	FWHM	18	23	28	deg
Threshold Current	I _{th}			0.5		A
Operating Current	I _{op}	5W		5	7	A

Note: General operating conditions

P_o ≤ 5W, t_w ≤ 5ns, Pulse repetition frequency ≤ 8kHz

■ Remarks:

Emitting area: 1 x 70μm

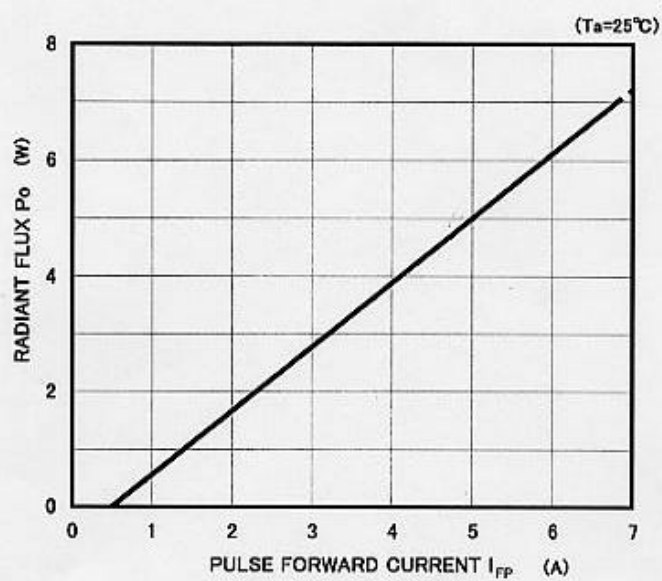
Tolerances for LD chip position : ±200μm for X, Y, Z axis

Tolerances for LD chip misalignment angle : ±3 degree for horizontal & vertical

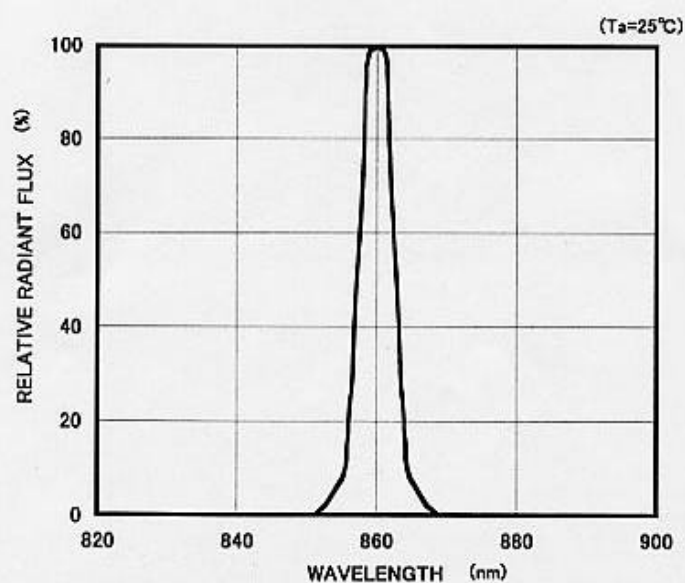
LD chip angle toward brim of package : 45 degree ± 5 degree

Type No.	ITEM	REVISIONS	DATE	APPROVED
L 7 6 9 0 - 0 2	△		19 . .	
	△		19 . .	
	△		19 . .	
	△		19 . .	
	△		19 . .	

Typical Radiant Flux(P_o) vs. Pulsed Forward Current(I_{FP})

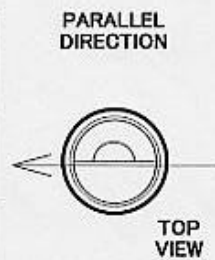
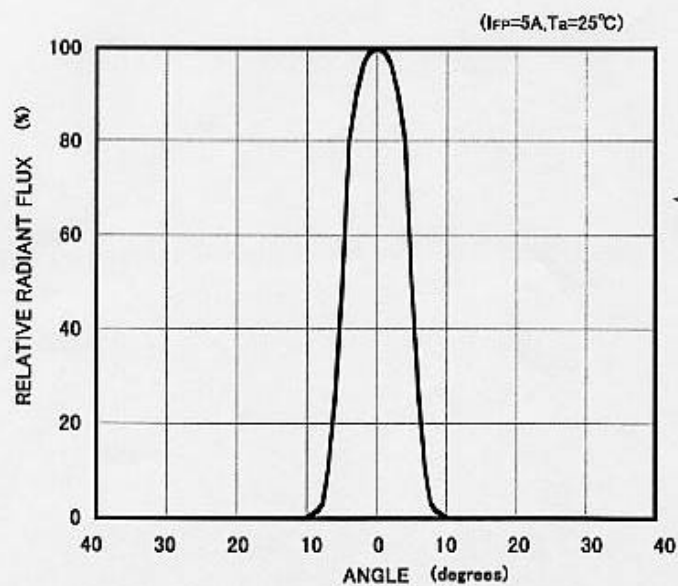
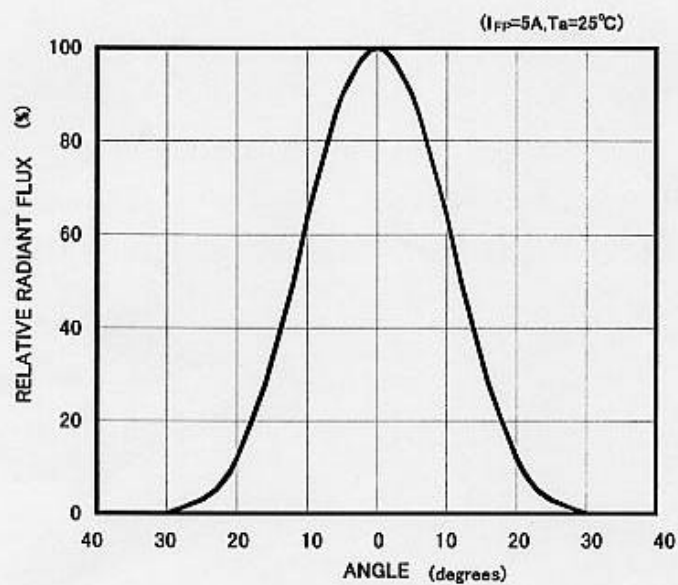


Typical Emission Spectrum



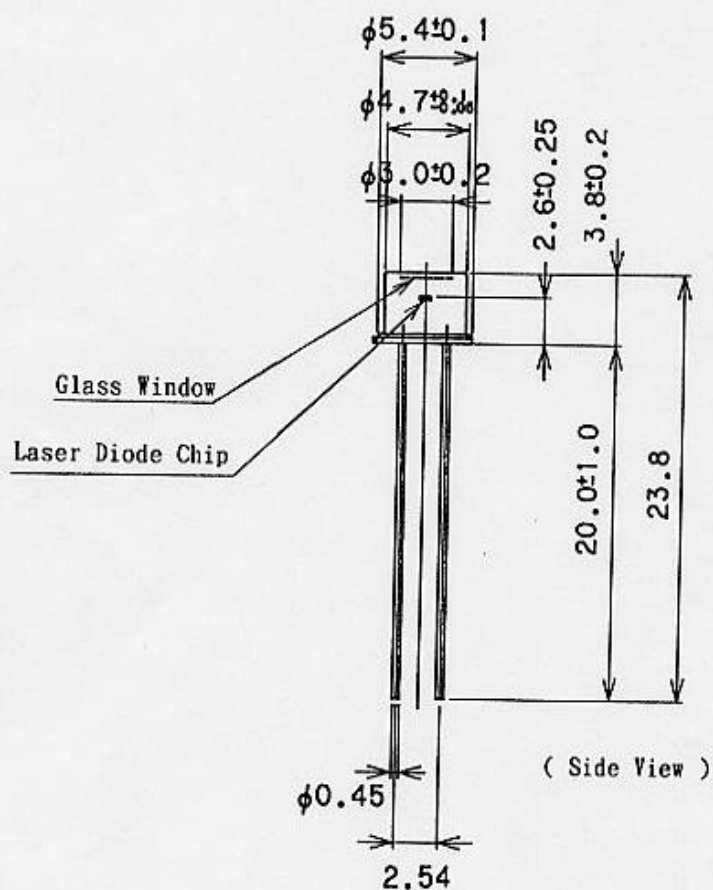
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Typical Directivity

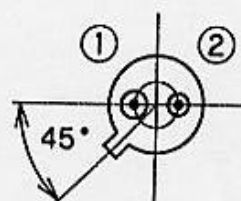


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	△		19 . .	
	△		19 . .	
	△		19 . .	
	△		19 . .	

Dimensional Outline and Lead Connection (Unit:mm)



(Side View)



(Bottom View)

[Lead Connection]

① Anode



② Cathode