

SLD (Super Luminescent Diode) L11607-04

■FEATURES

- High radiant flux density
- Low coherency

■APPLICATIONS

- Optical measurement
- Imaging instruments for medical



■ABSOLUTE MAXIMUM RATINGS (T_{op}(C) = 25 °C)

Parameter	Symbol	Value	Unit
Radiant output power	Φ_e	35	mW
Forward current	I_f	140	mA
Reverse voltage	V_r	1.5	V
Operating temperature	T _{op} (C)	0 to +50	°C
Storage temperature	T _{stg}	-20 to +80	°C

■ELECTRICAL AND OPTICAL CHARACTERISTICS (T_{op}(C) = 25 °C)

Parameter		Symbol	Conditions	Value			Unit
				Min.	Typ.	Max.	
Peak emission wavelength		λ_c	$\Phi_e = 30 \text{ mW}$	855	875	895	nm
Spectral radiation half bandwidth		$\Delta\lambda$		7	10	13	nm
Forward voltage		V_{op}		—	1.7	1.9	V
Forward current		I_{op}		—	110	125	mA
Beam spread angle	Parallel	$\theta_{//}$	$\Phi_e = 30 \text{ mW}$ FWHM	6	11	16	° (degree)
	Vertical	$\theta_{\perp}$		26	36	46	° (degree)
Emitting width		—	Value at designing	—	5	—	μm
Coherent length		L_c	$\Phi_e = 30 \text{ mW}$	—	70	—	μm

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Figure 1: Radiant output power vs. Forward current (typ.)

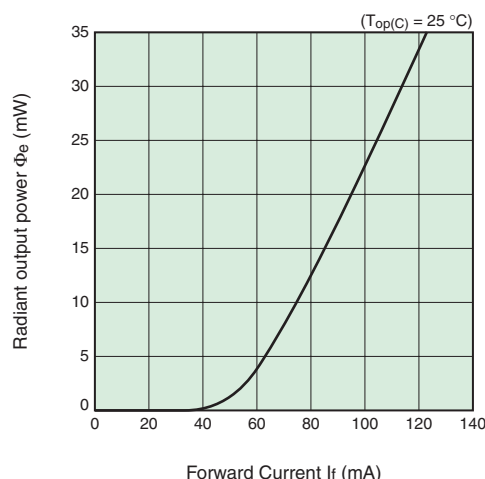


Figure 2: Typical emission spectrum

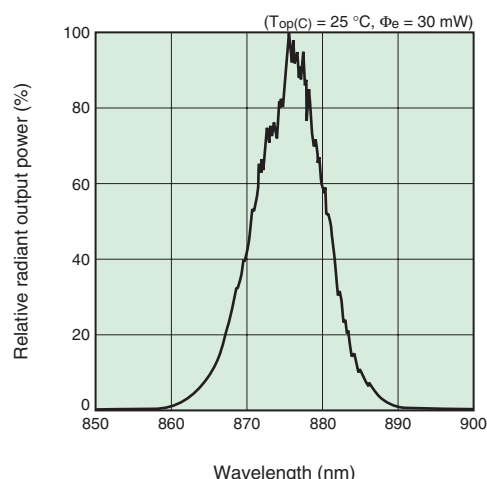


Figure 3: Directivity (typ.)

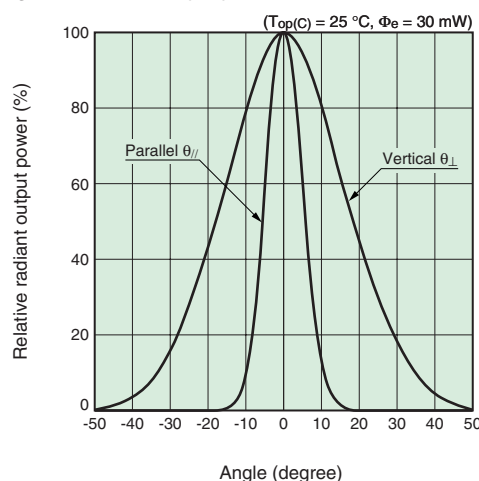
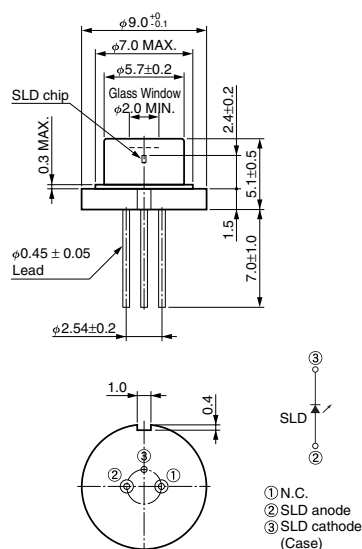


Figure 4: Dimensional outline (unit: mm)



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