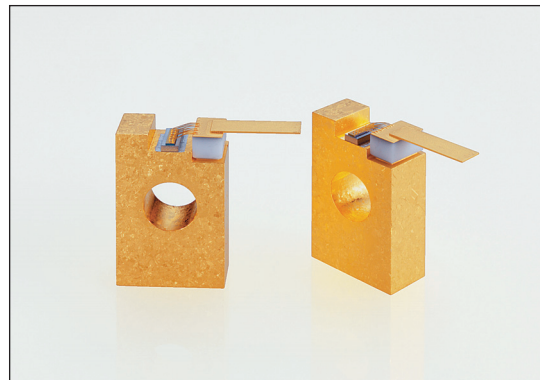


■ Features

- Lateral multimode (broad stripe)
- Radiant output power (CW): 5 W
- Peak emission wavelength: 808 nm
- Emitting area size: 200 μm × 1 μm



■ Applications

- Pumping source for solid state laser
- Processing
- Medical instrument
- Measure instrument



■ Absolute maximum ratings ($T_{op(c)} = 25\text{ °C}$)

Parameter	Symbol	Value	Unit
Radiant output power	Φ_e	5.5	W
Forward current	I_f	6.2	A
Reverse voltage	V_r	2	V
Operating temperature	$T_{op(c)}$	0 to +30	°C
Storage temperature	T_{stg}	-30 to +80	°C

■ Electrical and optical characteristics ($T_{op(c)} = 25\text{ °C}$)

Parameter	Symbol	Conditions	Value			Unit	
			Min.	Typ.	Max.		
Radiant output power	Φ_e	$I_f = 5.6\text{ A}$	—	5	—	W	
Forward current	I_{op}	$\Phi_e = 5\text{ W}$	—	5.6	—	A	
Peak emission wavelength	λ_p		—	808	—	nm	
Spectral radiation half bandwidth	$\Delta\lambda$		—	2	—	nm	
Forward voltage	V_f		—	1.9	—	V	
Beam spread angle	Horizontal	$\theta_{//}$	$\Phi_e = 5\text{ W}$ FWHM	—	8	—	degree
	Vertical	θ_{\perp}		—	32	—	degree
Emitting area	—	Value at designing	—	200 × 1	—	μm	
Lasing threshold current	I_{th}	—	—	1	—	A	

CW Laser Diode L10402 Series

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

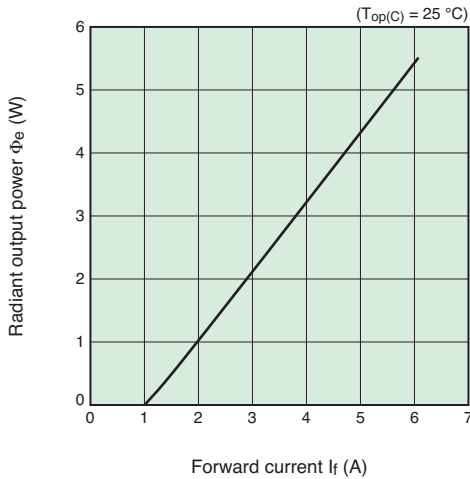


Figure 2: Typical emission spectrum

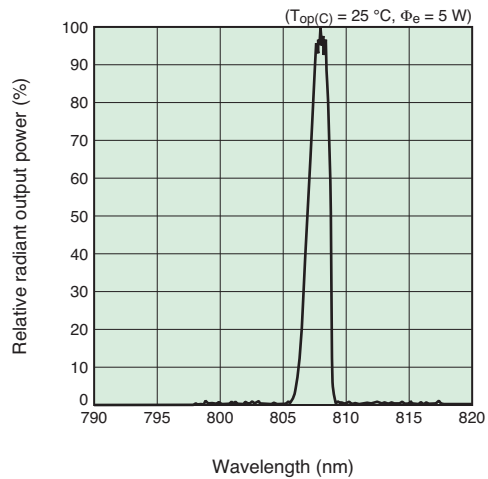


Figure 3: Directivity (typ.)

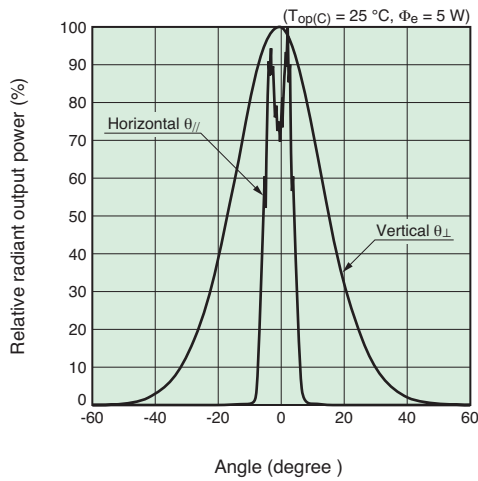
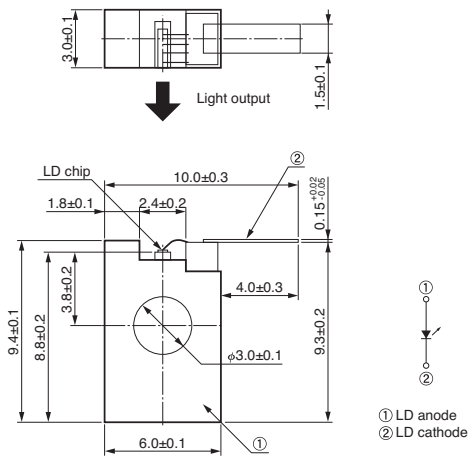
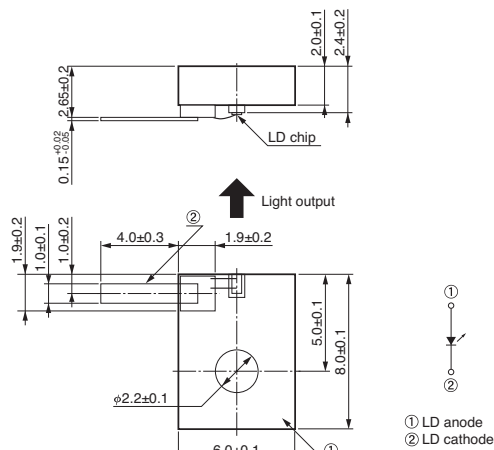


Figure 4: Dimensional outline (unit: mm)

●L10402-62
Side-out OHS (3 mmt)



●L10402-72
Head-out OHS



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