

■ **Features**

- Lateral multimode (broad stripe)
- Radiant output power (CW): 1 W
- Peak emission wavelength: 808 nm
- Emitting area size: 50 μm \times 1 μm

■ **Applications**

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



■ **Absolute maximum ratings (T_{op(C)} = 25 °C)**

Parameter	Symbol	Value	Unit
Radiant output power	Φ_e	1.2	W
Forward current	I_f	1.4	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 °C)**

Parameter	Symbol	Conditions	Value			Unit	
			Min.	Typ.	Max.		
Radiant output power	Φ_e	$\Phi_e = 1 \text{ W}$	0.8	1	—	W	
Operating voltage	I_{op}		—	1.2	1.38	A	
Peak emission wavelength	λ_p		798	808	810	nm	
Spectral half-width	$\Delta\lambda$		—	2	4	nm	
Operating voltage	V_f		—	2	3	V	
Beam spread angle	Horizontal		$\theta_{//}$	4	8	12	degree
	Vertical		θ_{\perp}	27	32	37	degree
Emitting area	—		—	50 \times 1	—	μm	
Lasing threshold current	I_{th}		—	—	0.35	0.45	A

CW Laser Diode L8763-42

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

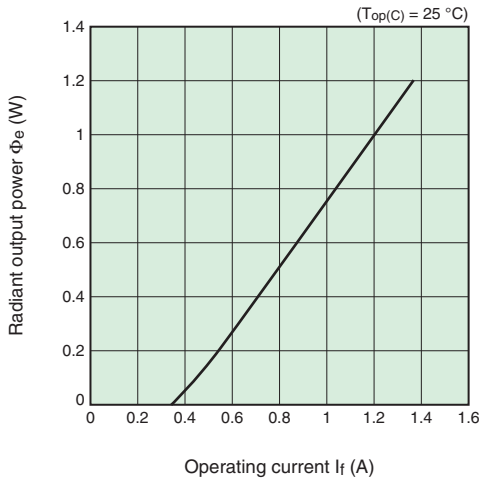


Figure 2: Typical emission spectrum

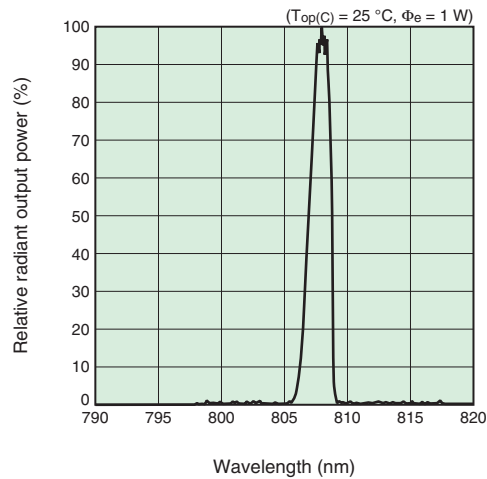


Figure 3: Directivity (typ.)

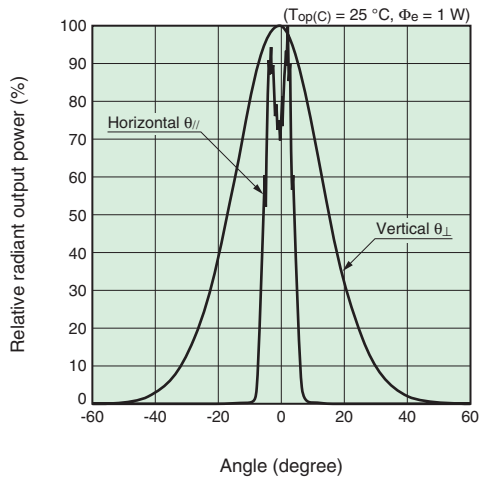
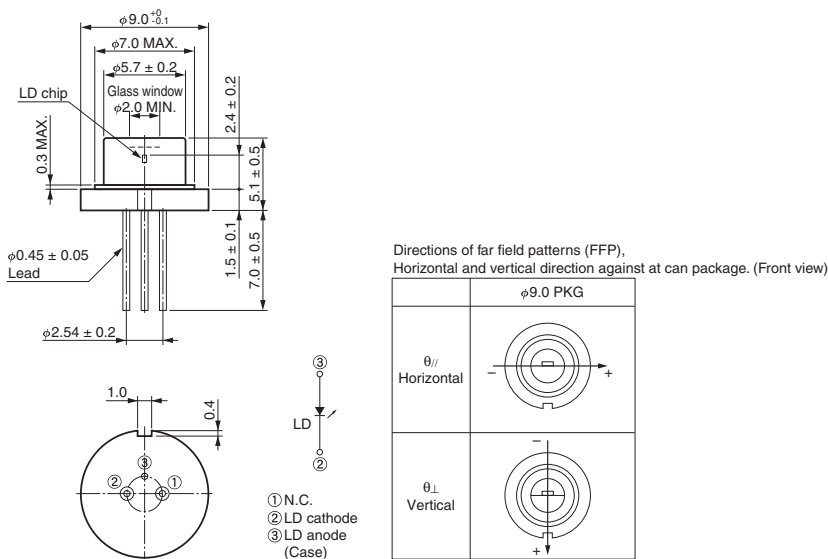


Figure 4: Dimensional outline (unit: mm)



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Cat. No. LCWLD2009E02
MAR. 2018 IP