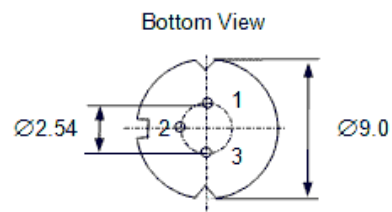
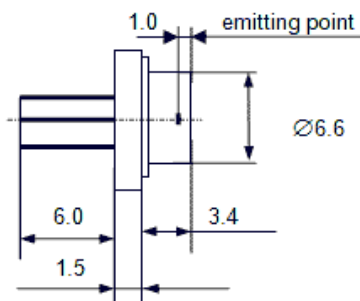
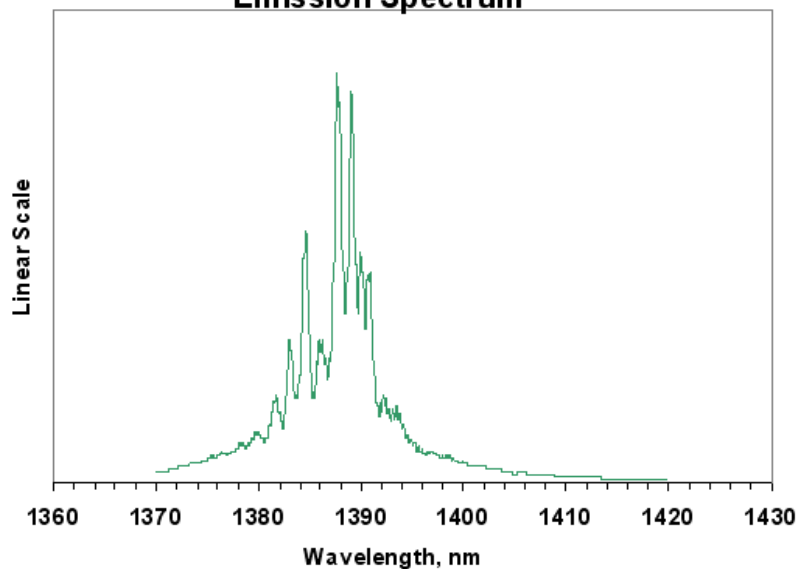


Single mode laser diode, 7mW at 1380 - 1410 nm, free space , QLD-1390-10S-AR

Optical and electrical characteristics (T = 25 °C)

Characteristics	Symbol	Min	Typ	Max	Unit	
Optical output power	P _{out}	4	7		mW	
Wavelength	λ	1380	1390	1410	nm	
Emitting area	WxH		3 x 1.5		$\mu\text{m} \times \mu\text{m}$	
Threshold current	I _{th}		50		mA	
Forward current	I _f		100	150	mA	
Forward voltage	V _f		2.0	2.5	V	
Beam Divergence	perpendicular	θ_{\perp}	25	30	35	Degree
	parallel	θ_{\parallel}	8	10	12	Degree
Static alignment	$\Delta\lambda_{\parallel}$ or $\Delta\alpha_{\perp}$			< ± 3	Degree	
Positional accuracy	$\Delta X, \Delta Y, \Delta Z$			± 100	μm	
Spectral width (FWHM)	$\Delta\lambda$	3	6	10	nm	
Mode structure		Single Transverse Mode				
Differential Efficiency	DP _o /dI _{op}		0.5		mW / mA	
Monitoring Current	I _m	0.01			mA	

Emission Spectrum



Pin	Connection
1	LD Anode
2	LD Cathode, PD Anode
3	PD Cathode

