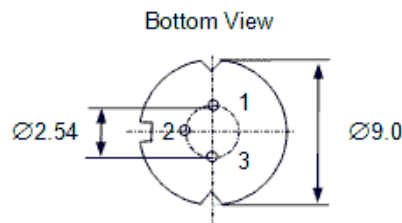
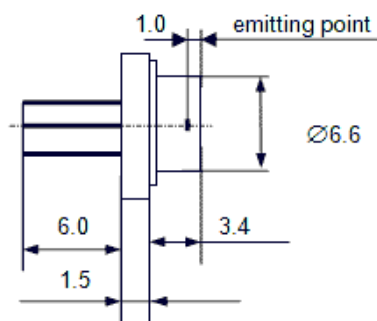
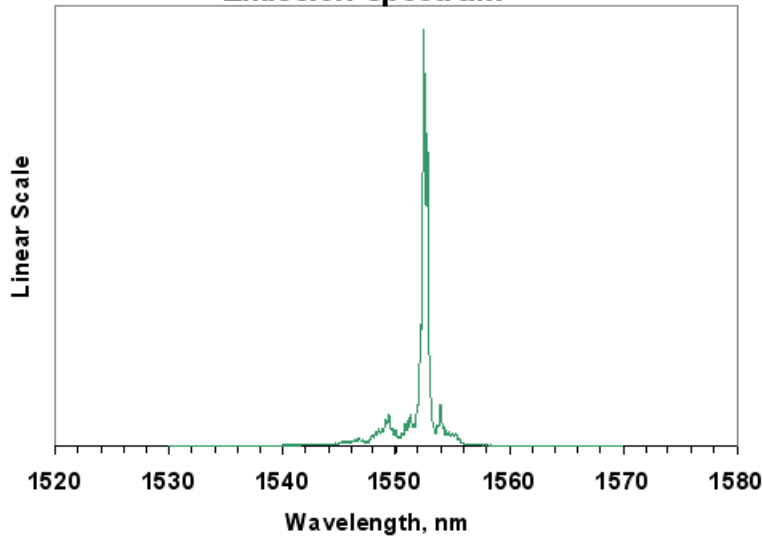


Single mode laser diode, 30mW @ 1550nm, QLD-1550-40S-AR

Optical and electrical characteristics (T = 25 °C)

Characteristics		Symbol	Min	Typ	Max	Unit
Optical output power		P _{out}	20	30		mW
Wavelength		λ	1535	1550	1565	nm
Emitting area		WxH		5 x 1		$\mu\text{m} \times \mu\text{m}$
Threshold current		I _{th}		80	120	mA
Forward current		I _f		190	240	mA
Forward voltage		V _f		1.6	2.2	V
Beam Divergence	perpendicular	θ_{\perp}	25	30	35	Degree
	parallel	θ_{\parallel}	8	10	12	Degree
Static alignment		$\Delta\lambda/x \Delta\alpha_{\perp}$			< ± 3	Degree
Positional accuracy		$\Delta X, \Delta Y, \Delta Z$			± 100	μm
Spectral width (FWHM)		$\Delta\lambda$		4	8	nm
Mode structure			Single Transverse Mode			
Differential Efficiency		DPo/dIop		0.5		mW / mA
Monitoring output current		I _m	0.07			mA

Emission Spectrum



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

