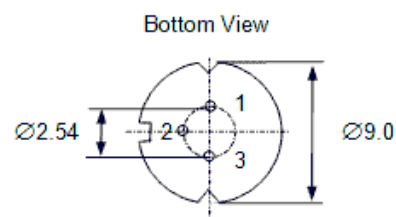
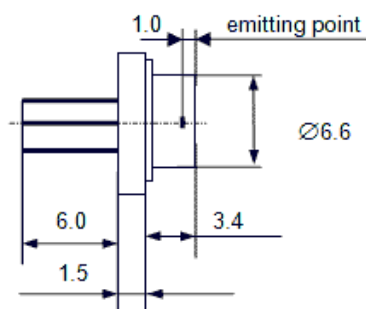
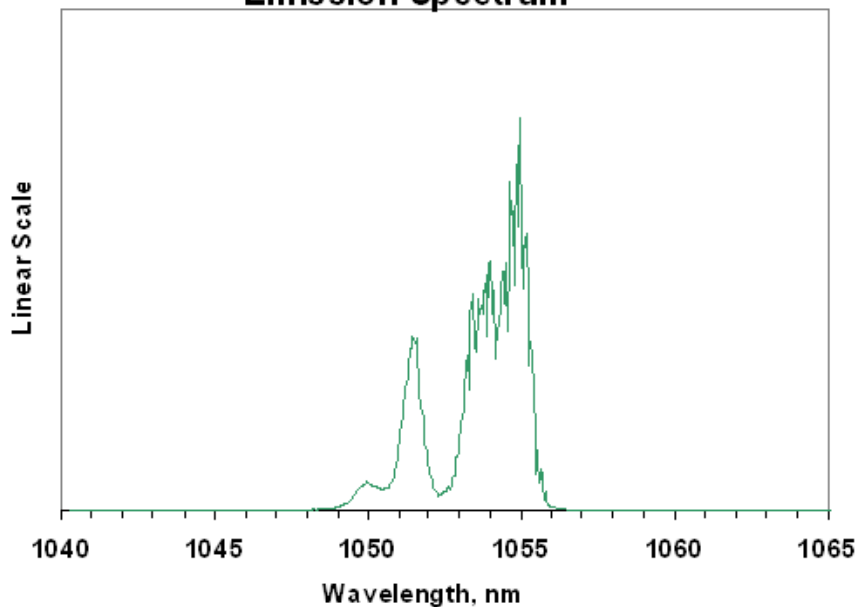


## Single mode laser diode, 50mW @ 1060nm, QLD-1060-50S-AR

Optical and electrical characteristics (T = 25 °C)

Characteristics	Symbol	Min	Typ	Max	Unit	
Optical output power	P <sub>out</sub>		50	60	mW	
Wavelength	$\lambda$	1055	1065	1075	nm	
Emitting area	WxH		3x1.5		$\mu\text{m} \times \mu\text{m}$	
Threshold current	I <sub>th</sub>	55	65	75	mA	
Forward current	I <sub>f</sub>		180	260	mA	
Forward voltage	V <sub>f</sub>		2.0	2.2	V	
Beam Divergence	perpendicular	$\theta_{\perp}$	25	30	35	Degree
	parallel	$\theta_{\parallel}$	8	10	12	Degree
Static alignment	$\Delta\lambda_{\parallel} \Delta\alpha_{\perp}$			<±3	Degree	
Positional accuracy	$\Delta X, \Delta Y, \Delta Z$			±100	$\mu\text{m}$	
Spectral width (FWHM)	$\Delta\lambda$	2.0	3.0	4.0	nm	
Mode structure		Single Transverse Mode				
Differential Efficiency	DP <sub>o</sub> /dI <sub>op</sub>		0.3		mW / mA	
Monitoring Output Current	I <sub>m</sub>	0.07			mA	

### Emission Spectrum



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

