

808nm 3.5W Single-emitter Laser Diode

Part number STR-808A-150-3-1-SE

	Symbol	Typ.	Unit
Operation			
Central wavelength	λ	808	nm
Output power	P_o	3.5	W
Operation mode		CW	
Geometrical			
Emitter width	W	150	um
Cavity length	L	1000	um
Chip width	W	500	um
Chip height	H	150	um
Electro-optical data			
Threshold current	I_{th}	0.2	A
Operating current	I_{op}	3	A
Operating voltage	V_{op}	1.9	V
Slope efficiency	ηd	1.3	W/A
Total conversion efficiency	η	61	%
Slow axis divergence	θ	8	degree
Fast axis divergence	θ	24	degree
Spectral width	$\Delta \lambda$	3	nm
Polarisation		TM	

- ① Mounted on a heat sink with $R_{th} = 2\sim 3$ K/W, coolant temperature 25°C , operating at nominal power
- ② Slow axis divergence is full width at 95 % power content
- ③ Fast axis divergence and spectral width are FWHM (Full width half maximum)

