

LL850LD100H5T 850nm 100mW 50°C Laser Diodes

■ Specifications

Wavelength: 850nm
Light Output: 100mW CW
Package Type: TO-18(Φ5.6mm)

■ Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbols	Ratings	Units
Optical Output	Po(CW)	100	mW
Reverse Voltage	Laser Vr	2	V
Operating Temperature	Top	-10 ~ +50	°C
Storage Temperature	Tstg	-40 ~ +80	°C

■ Electrical and optical Characteristics(Tc=25°C)

Parameter		Symbols	Conditions	Min	Typ	Max	Units
Threshold Current		Ith	-	-	25	45	mA
Operating Current		Iop	Po=100mW	-	145	175	mA
Operating Voltage		Vop	Po=100mW	-	1.9	2.1	Volts
Slope		η	-	0.5	0.8	-	mW/mA
Efficiency			-				
Beam Divergence (FWHM)	Parallel	$\theta \parallel$	Po=100mW	8	12	14	deg
	Perpendicular	$\theta \perp$	Po=100mW	30	35	40	deg
Parallel Deviation Angle		$\Delta \theta \parallel$	Po=100mW	-3	-	3	deg
Perpendicular Deviation Angle		$\Delta \theta \perp$	Po=100mW	-3	-	3	deg
Emission Point Accuracy		$\Delta X, \Delta Y, \Delta Z$	Po=100mW	-80	-	80	um
Lasing Wavelength		λp	Po=100mW	820	830	840	nm

Im is sorting by custom's need

◎ $\theta \parallel$ and $\theta \perp$ are defined as the angle within which the intensity is 50% of the peak value.

