

HLD980050N4T 980nm 50mW 40°C Laser Diodes

Specifications

Wavelength:	980nm
Light Output:	50mW CW
Package Type:	TO-18(Φ 5.6mm)

Absolute Maximum Ratings (Tc=25°C)

Parameter		Symbols	Ratings	Units
Optical Output		Po(CW)	50	mW
Reverse Voltage	Laser	Vr	2	V
	PIN PD	Vr (PIN)	30	V
Operating Temperature		Top	-10 ~ +40	°C
Storage Temperature		Tstg	-40 ~ +80	°C

Electrical and optical Characteristics(Tc=25°C)

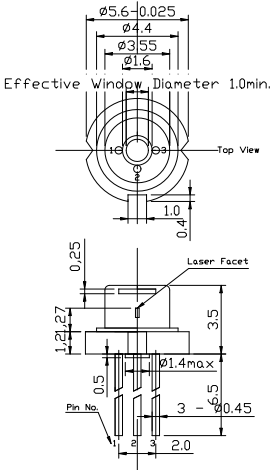
Parameter		Symbols	Conditions	Min	Typ	Max	Units
Threshold Current		Ith	-	-	15	25	mA
Operating Current		Iop	Po=50mW	-	75	85	mA
Operating Voltage		Vop	Po=50mW	-	1.6	1.8	Volts
Slope		η	30mW-10mW	0.5	0.8	-	mW/mA
Efficiency			I30mW-I10mW				
Monitor Current		Im	Po=50mW	0.1	0.2	0.5	mA
Beam Divergence (FWHM)	Parallel	θ ∥	Po=50mW	8	12	14	deg
	Perpendicular	θ ⊥	Po=50mW	30	35	40	deg
Parallel Deviation Angle		△ θ ∥	Po=50mW	-3	-	3	deg
Perpendicular Deviation Angle		△ θ ⊥	Po=50mW	-3	-	3	deg
Emission Point Accuracy		△X,△Y,△Z	Po=50mW	-80	-	80	um
Lasing Wavelength		λ p	Po=50mW	970	980	990	nm

Im is sorting by custom's need

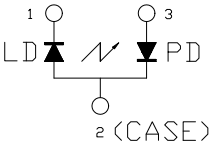
◎ θ ∥ and θ ⊥ are defined as the angle within which the intensity is 50% of the peak value.

Package

Tolerance : +/-0.2
Unit : mm



Pin Connection



[N]