

HLD405120H7J      405nm      50mW      70℃      Laser Diodes      AUTO      PACKAGE

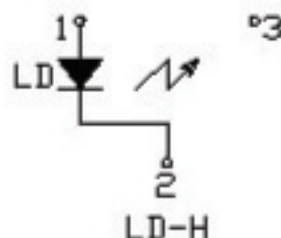
### ■ Specifications for Blu-ray Disc / HD DVD drive

Wavelength: 405nm  
 Light Output: 50mW CW  
 Package Type: TO-18(Φ 5.6mm)



### ■ Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbols	Ratings	Units
Optical Output	Po(CW)	50	mW
Reverse Voltage	Laser Vr	5	V
Operating Temperature	Top	-0 ~ +70	℃
Storage Temperature	Tstg	-40 ~ +80	℃



### ■ Electrical and optical Characteristics(Tc=25℃)

Parameter	Symbols	Conditions	Min	Typ	Max	Units	
Threshold Current	Ith	-	-	25	45	mA	
Operating Current	Iop	Po=100mW	-	35	55	mA	
Operating Voltage	Vop	Po=100mW	-	4.8	5.5	Volts	
Slope		-					
Efficiency	$\eta$	-	-	1.4	1.8	mW/mA	
Beam Divergence (FWHM)	Parallel	$\theta \parallel$	Po=100mW	6	9	14	deg
	Perpendicular	$\theta \perp$	Po=100mW	16	20	24	deg
Parallel Deviation Angle	$\Delta \theta \parallel$	Po=100mW	-3	-	3	deg	
Perpendicular Deviation Angle	$\Delta \theta \perp$	Po=100mW	-3	-	3	deg	
Lasing Wavelength	$\lambda_p$	Po=100mW	400	406	415	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.