

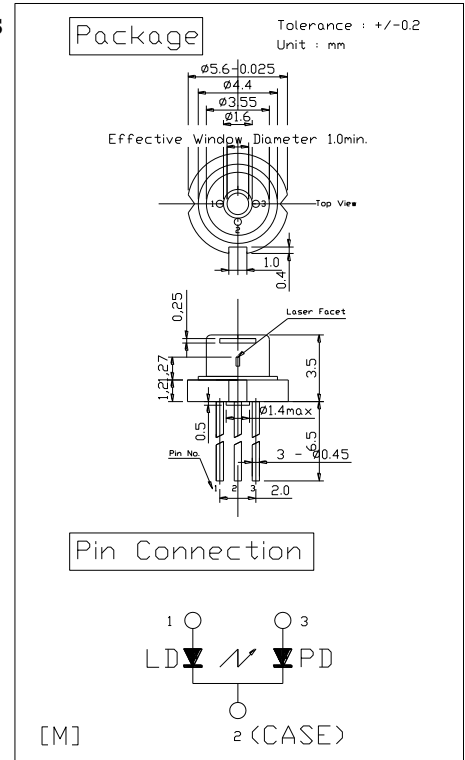
HLD405020M7J 405nm 20mW 70°C Laser Diodes

■ Specifications

Wavelength: 405nm
 Light Output: 20mW CW
 Package Type: TO-18(Φ 5.6mm)

■ Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbols	Ratings	Units
Optical Output	Po(CW)	20	mW
Reverse Voltage	Laser	Vr	5 V
	PIN PD	Vr (PIN)	30 V
Operating Temperature	Top	-0 ~ +70	°C
Storage Temperature	Tstg	-40 ~ +80	°C



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

Parameter	Symbols	Conditions	Min	Typ	Max	Units	
Threshold Current	Ith	-	-	26	50	mA	
Operating Current	Iop	Po=10mW	-	35	60	mA	
Operating Voltage	Vop	Po=10mW	-	4.8	5.6	Volts	
Slope Efficiency	η	-	-	1.3	-	mW/mA	
Monitor Current	Im	Po=10mW	0.1	0.2	1.0	mA	
Beam Divergence (FWHM)	Parallel	θ	Po=10mW	6	9	12	deg
	Perpendicular	θ ⊥	Po=10mW	16	20	24	deg
Parallel Deviation Angle	Δθ	Po=10mW	-3	-	3	deg	
Perpendicular Deviation Angle	Δθ ⊥	Po=10mW	-2	-	2	deg	
Lasing Wavelength	λ p	Po=10mW	395	406	415	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.