

# Laser diode, 980nm, 50mW, diameter 5.6mm

Reference: AM4872

EAN13: -

UPC: 90132000

## Product attributes:

## Product features:

Light color: Infrared  
Wavelength: 980 nm  
Voltage: 1.6-2.1 V DC  
Performance: 50 mW  
Housing: TO-18  
Waterproof grade: IP20  
Lifetime: 5,000 hours

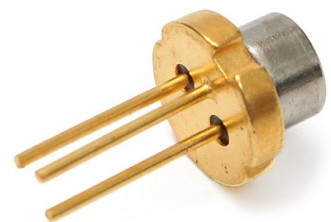
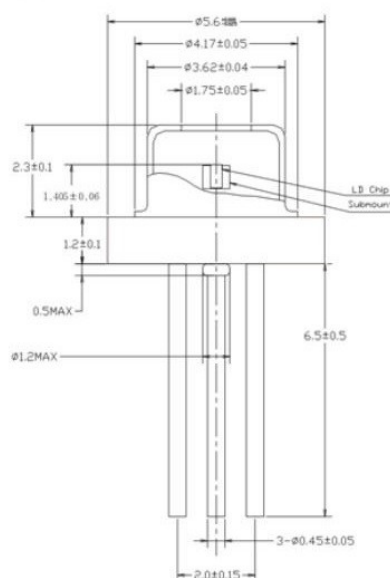
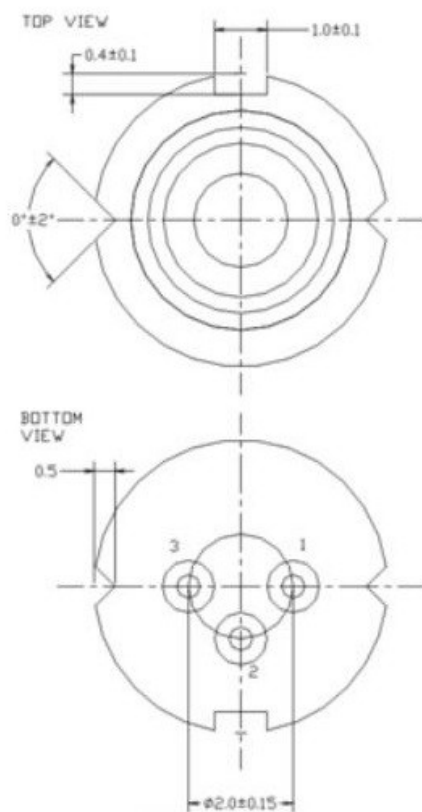


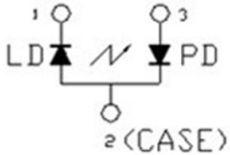
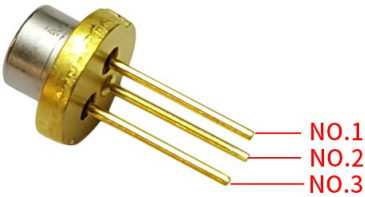
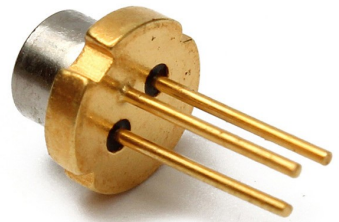
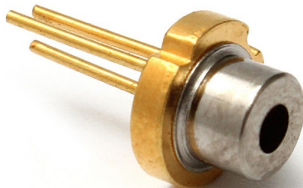
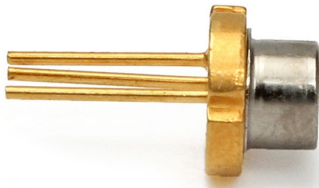
## Product description:

Laser diode with a wavelength of 980nm and a power of 10mW.

wavelength 980nm  
voltage 1.6-2.1V  
reverse voltage 2V  
current 78-82mA  
degree of protection IP20  
working temperature -10 - 50 °C  
size 5.6x5.6x 10 mm  
price for 1 piece

Pin connection: pin no. 2 (case) = ANODE, pin no. 1 = cathode LD, pin no. 3 = anode PD





■ Electrical and optical Characteristics (T <sub>c</sub> =25°C)				[N]			# (CASE)
Parameter	Symbols	Conditions	Min	Typ	Max	Units	
Threshold Current	I <sub>th</sub>	-	-	20	30	mA	
Operating Current	I <sub>op</sub>	Po=50mW	-	78	82	mA	
Operating Voltage	V <sub>op</sub>	Po=50mW	-	1.6	2.1	Volts	
Slope		30mW-10mW					
Efficiency	η	30mW-10mW	0.5	0.8	-	mW/mA	
Monitor Current	I <sub>m</sub>	Po=50mW	-	0.2	0.8	mA	
Beam Divergence (FWHM)	Parallel	θ <sub>  </sub>	Po=50mW	8	12	14	deg
	Perpendicular	θ <sub>⊥</sub>	Po=50mW	30	35	40	deg
Parallel Deviation Angle	Δθ <sub>  </sub>	Po=50mW	-3	-	3	deg	
Perpendicular Deviation Angle	Δθ <sub>⊥</sub>	Po=50mW	-3	-	3	deg	
Emission Point Accuracy	ΔX, ΔY, ΔZ	Po=50mW	-80	-	80	μm	
Lasing Wavelength	λ <sub>p</sub>	Po=50mW	965	980	995	nm	

I<sub>m</sub> is sorted by custom's need

#### HLD980050N4T 980nm 50mW 40°C Laser Diodes

##### ■ Specifications

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

##### ■ Absolute Maximum Ratings (T<sub>c</sub>=25°C)

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

##### ■ Electrical and optical Characteristics (T<sub>c</sub>=25°C)

