特性参数

Absolute Maximum Ratings Ta=25

parameter	symbol			unit
power	Po		7	mW
backward voltage	VR	LD	2	V
		PD	30	
working temperature	Topr		-20 85	
Storage Temperature	Tstg		-40 85	
Welding conditions	Tsol		reflow soldering 240°C 6s manual welding 300°C 3s	

Recommended Operating Conditions

parameter	symbol		unit
Threshold Current	Ith	11	mA
Working Current	Iop	17	mA
working voltage	Vop	2.3	V

XINGLIGHT All Rights Reserved. Spec No: V1.0 - Z Date: 08/20/2026

Optoelectronic Parameters

parameter	symbol	Test conditions	min	typ	max	unit
Threshold Current	Ith	-	-	11	15	mA
Working Current	Iop	Po=7mW	-	17	20	mA
working voltage	Vop	Po=7mW	-	2.1	2.3	V
Central wavelength	λ	Po=7mW	-	650	660	nm
beam divergence angle	θ	Po=7mW	-	36	38	°
Beam Directionality	θ	Po=7mW	-	7	10	°
Misaligned beam angle	Δ θ	Po=7mW	-3	-	+3	°
	Δ θ	Po=7mW	-3	-	+3	°
Monitoring Current	Im	Po=7mW, Vrd=5V	-	0.2	0.3	mA

remarks

[1] 50%

and are defined as the angles of the fast axis and slow axis at the 50% peak value.

[2] 25 ,

XINGLIGHT All Rights Reserved. Spec No: V1.0 - Z Date: 08/20/2026

XINGLIGHT All Rights Reserved. Spec No: V1.0 - Z Date: 08/20/2026

使用注意事项

Precautions

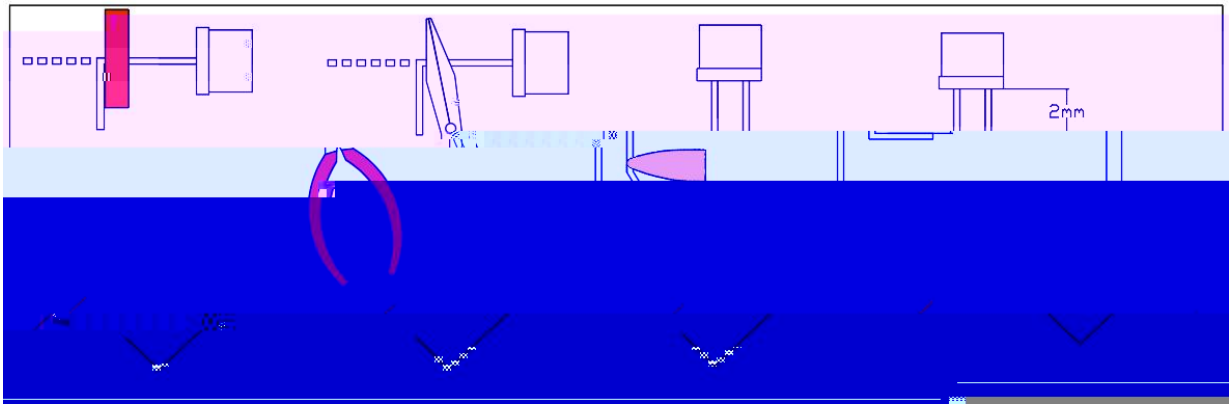
1. Feet assembly

1 2

It must be 2 mm from the colloid to bend the bracket.

2 PCB

Welding must be performed at normal temperatures. Once the laser diode has been properly mounted onto the PCB, avoid applying mechanical pressure to its pins whenever possible.



2. Electrostatic protection

“ ” HBM <800V

250V-500V <100V

Plastic-coated laser diodes do not have a fixed "protection voltage" value; their electrostatic sensitivity typically ranges from <800 V on the HBM human model , with actual tolerance usually limited to 250–500 V. Protection measures must be implemented according to the <100 V operating standard.

3.

During laser operation, avoid exposure of the eyes and skin to laser radiation.

If there are any modifications to the specification sheet, no further notice will be given.

XINGLIGHT All Rights Reserved. Spec No: V1.0 - Z Date: 08/20/2026