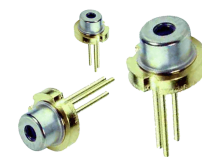


EGISMOS *DATASHEET*

980nm Laser Diode Key features

Wavelength $\lambda = 980\text{nm}$
Output power = 50mW
Package type = 5.6mm Φ
High reliability



US-D6-4-980-50

Applications

General Purpose Infrared Red Laser Light Source
Optical Communication & Infrared Red Laser Module for Industry Application
Thermal Device & Medical Instruments

Laser Diode Solutions

US-D6-4-980-50 is a 980nm band laser diode. It's an attractive light source, with a typical light output power of 50mW. It's suitable for use as high reliability laser diode in a wide range of industrial, military and medical application.

Electrical and Optical Characteristics at $T_c = 25^\circ\text{C}$

Item	Symbols	Min.	Typ.	Max.	Unit	Condition
Threshold Current	I _{th}	-	12	20	mA	-
Operating Current	I _{op}	-	75	100		P _o =50mW
Operating Voltage	V _{op}	1	1.5	2.1	Volt	P _o =50mW
Slope efficiency	η	0.5	0.8	-	mW/mA	30mW-10mW/ I _{30mW} -I _{10mW}
Lasing Wavelength	λ_p	965	980	995	nm	P _o =50mW
Beam Divergence	$\Theta_{//}$	8	12	14	deg	P _o =50mW
	Θ_{\perp}	30	35	40	deg	P _o =50mW

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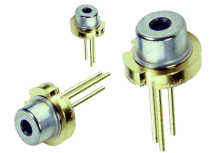
<http://www.egismos.com>
TEL: +1-888-3481454
FAX: +1-604-4339864
E-Mail: sales@egismos.com

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Absolute Maximum Rating at Tc=25°C

Items	Symbols	Values	Unit
Optical output power	Po	50	mW
Reverse voltage(LD)	V _{RL}	2	V
Operating Temperature	Tc	-10~+40	°C
Storage Temperature	Ts	-15~+85	°C

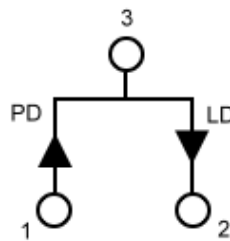
Note: Pulse condition: Pulse width ≤ 1μs, duty ≤ 50%



US-D6-4-980-50

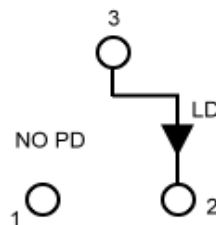
Package Type

Ver. A



N type (N,L,A)

Ver. B



Z type

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<http://www.egismos.com>

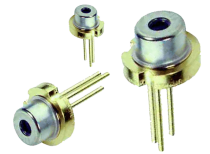
TEL:+1-888-3481454

FAX:+1-604-4339864

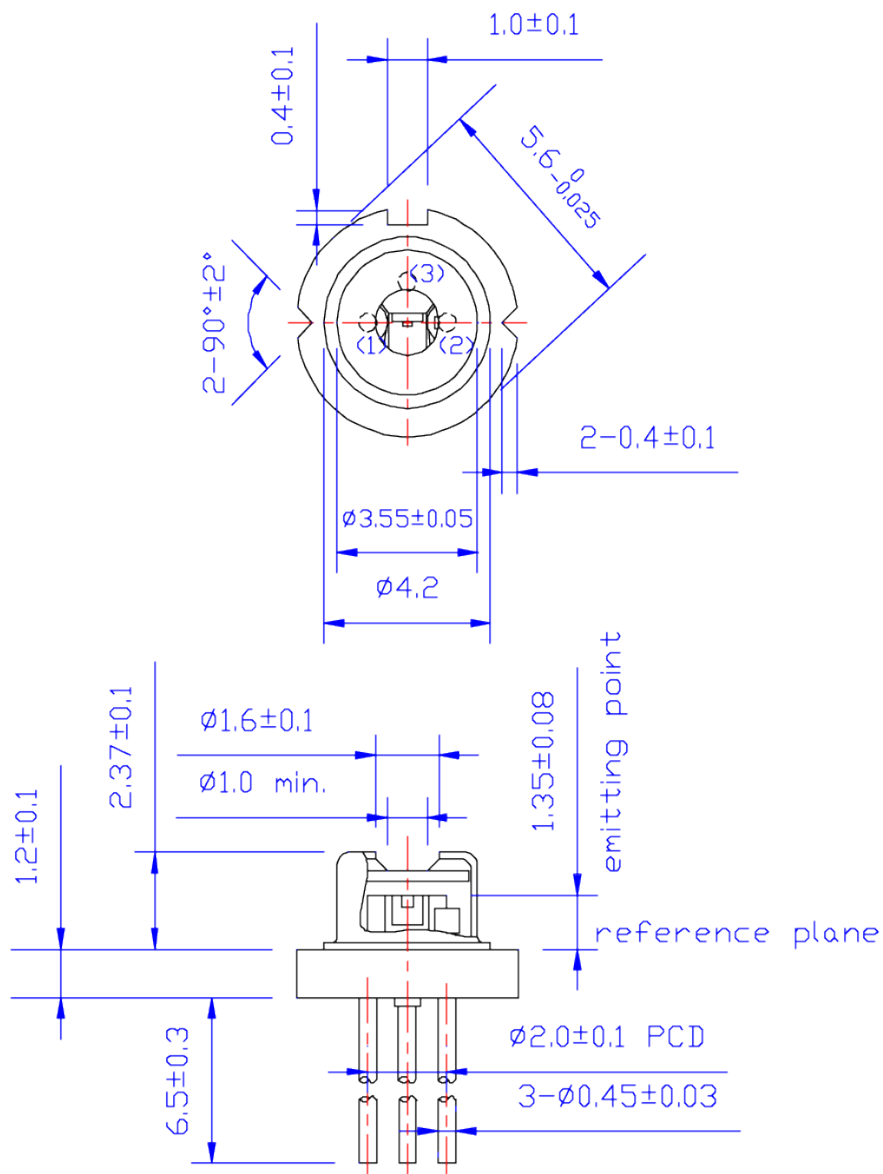
E-Mail:sales@eGismos.com

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Laser Diode Package Drawing



US-D6-4-980-50



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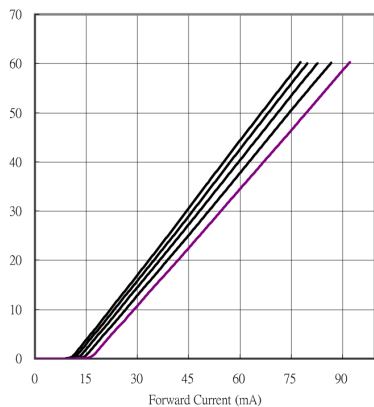
FAX:+1-604-4339864

E-Mail:sales@eGismos.com

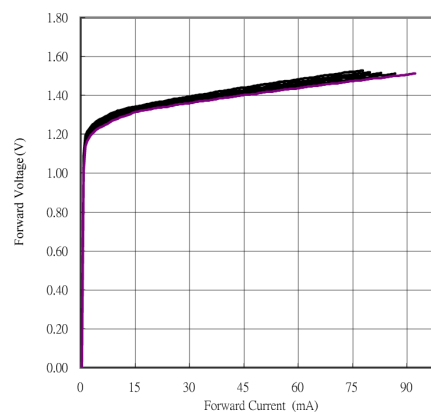
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Typical characteristic curves

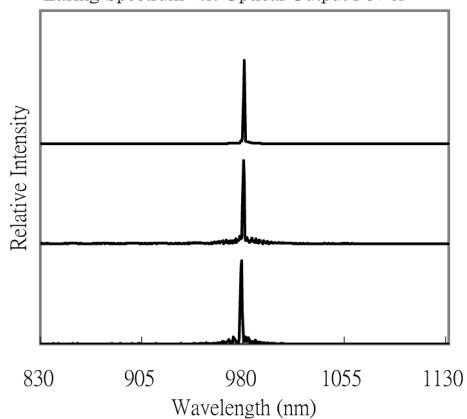
Optical Output Power v.s. Forward Current



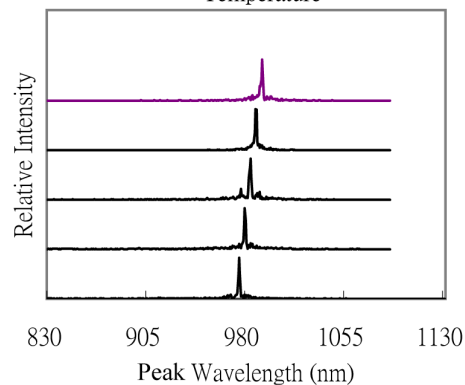
Forward Voltage v.s. Forward Current



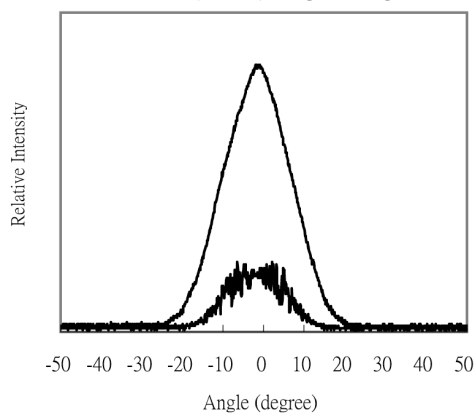
Lasing Spectrum v.s. Optical Output Power



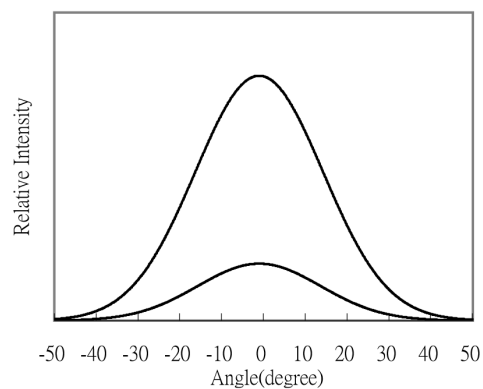
Lasing Spectrum v.s. Case Temperature



Far-Field Pattern(Parallel) vs. Optical Output Power



Far-Field Pattern(Perpendicular) vs. Optical Output Power



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