

Egismos DATASHEET

780nm Compact Laser Diode Modules Key features

Visible light $\lambda = 780\text{nm}$
 Output powers = 50mW
 Package type = 5.6mm ϕ
 High reliability

Applications

General Purpose Infrared Red Laser Light Source
 Printer Scanner Unit & Infrared Red Laser Module for Industry Application
 Optical Storage & High Precision Engineering Instruments

Laser Diode Solutions

SS-D6-6-785-50 is a MOCVD grown 780nm band laser diode. It's an attractive light source, with a typical light output power of CW 50mW. It's suitable for use as high reliability laser diode in a wide range of industrial application.



SS-D6-6-785-50

Electrical and Optical Characteristics at Tc=25°C

Item	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	50	-	mW	-
Threshold Current	Ith	-	25	40	mA	-
Operating Current	Iop	-	75	100	mA	Po=50mW
Differential Efficiency	η	0.6	1.0	1.4	mW/mA	40mW/ I(45mW)-I(5mW)
Operating Voltage	Vop	-	2	2.8	V	Po=50mW
Peak Wavelength	λ_p	775	785	795	nm	Po=50mW
Beam Divergence	$\Theta_{//}$	7	9	12	deg	Po=50mW
	Θ_{\perp}	17	22	27	deg	Po=50mW
Beam Angle	$\Delta\Theta_{//}$	-	-	± 2.0	deg	
	$\Delta\Theta_{\perp}$	-	-	± 3.0	deg	
Monitor Current	Im	0.1	0.25	0.6	mA	Po=50mW
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	± 60	μm	
Astigmatism	As	-	5	-	μm	Po=50mW

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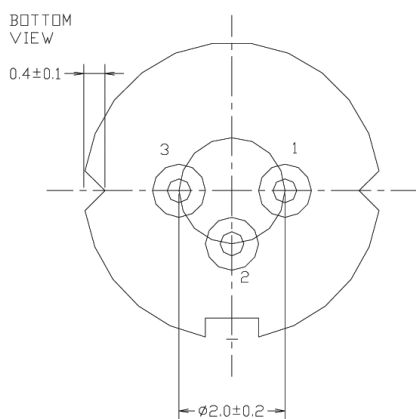
Absolute Maximum Rating at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	Po	50	mW
Laser Diode Reverse Voltage	V	2	V
Photo Diode Reverse Voltage	V	30	V
Operating Temperature	To	-10~+60	°C
Storage Temperature	Ts	-40~+85	°C

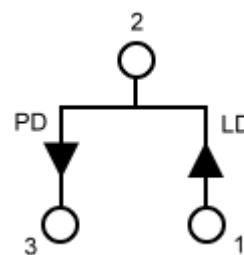


SS-D6-6-785-50

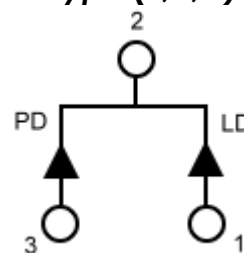
Electrical Connection



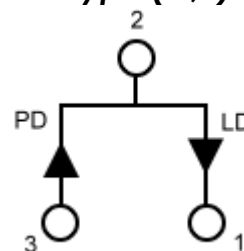
Package Type



P type (P,U,C)



M type (M,R)



N type (N,L,A)

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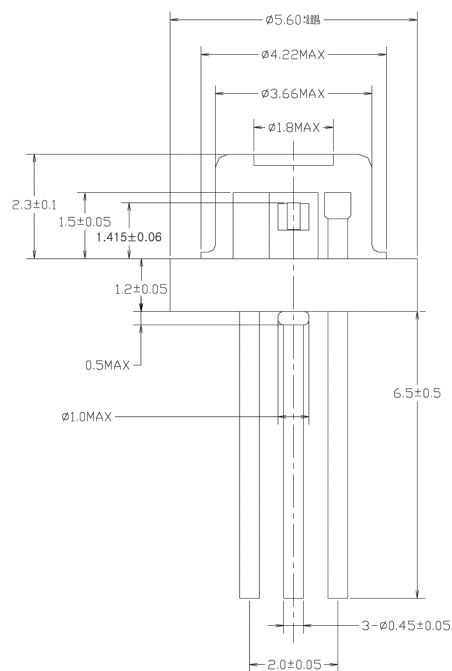
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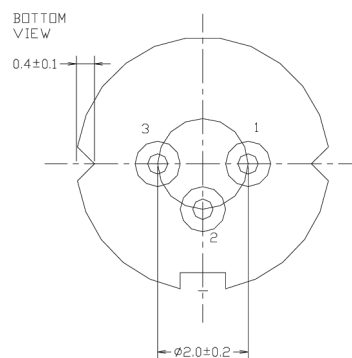
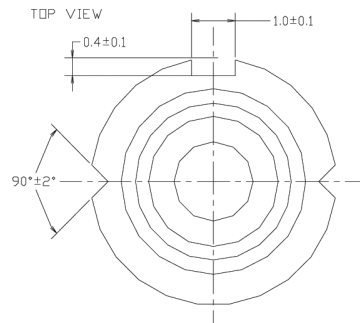
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Laser Diode Package Drawing



SS-D6-6-785-50



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