

Egismos *DATASHEET*

650nm Compact Laser Diode Modules Key features

Visible light $\lambda = 660\text{nm}$
 Output powers = 50mW
 Package type = 5.6mm ϕ
 High reliability

Applications

Laser Pointer & General Purpose Red Laser Light Source
 Laser Module & High Precision Engineering Instruments
 Optical Sensor Application of Engineering Instruments



RS-D6-7-660-50

Laser Diode Solutions

RS-D6-7-660-50 is a MOCVD grown 660nm band InGaAs 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.

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

| Item | Symbols | Min. | Typ. | Max. | Unit | Condition |
|----------------------|--------------------------------|------|------|------|---------------|-------------------------------|
| Optical Output Power | Po | - | 52 | - | mW | - |
| Threshold Current | I _{th} | - | 40 | 55 | mA | Po=50mW |
| Operating Current | I _{op} | - | 85 | 120 | mA | Po=50mW |
| Slope Efficiency | SE | 0.7 | 1.0 | 1.4 | mW/mA | Po=45~50mW |
| Operating Voltage | V _{op} | 1.9 | 2.5 | 3.0 | V | Po=50mW |
| Peak Wavelength | λ_p | 655 | 658 | 666 | nm | Po=50mW |
| Beam Divergence | $\Theta_{//}$ | 5.5 | 7.5 | 10 | deg | Po=50mW |
| | Θ_{\perp} | 15 | 17 | 20 | deg | Po=50mW |
| Beam Angle | $\Delta\Theta_{//}$ | -3 | - | +3 | deg | Po=50mW |
| | $\Delta\Theta_{\perp}$ | -3 | - | +3 | deg | Po=50mW |
| Monitor Current | I _m | 0.05 | 0.21 | 0.5 | mA | Po=50mW V _r =5V |
| Optical Distance | $\Delta X, \Delta Y, \Delta Z$ | -80 | - | +80 | μm | Po=50mW |

Egismos

<http://www.egismos.com>

TEL: +1-888-3481454

FAX: +1-604-4339864

E-Mail: sales@egismos.com

Egismos *DATASHEET*

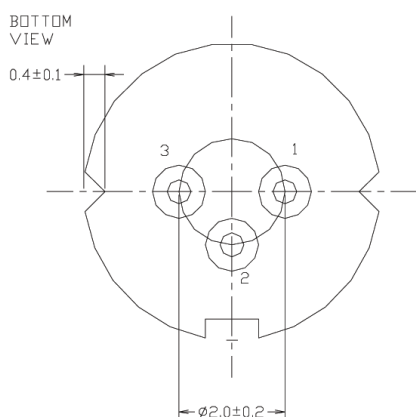
Absolute Maximum Rating at Tc=25°C

| Items | Symbols | Values | Unit |
|---------------------------------|---------|---------|------|
| Optical Output Power | Po | 52 | mW |
| Laser Diode Reverse Voltage(LD) | V | 2 | V |
| Photo Diode Reverse Voltage(PD) | V | 30 | V |
| Forward Current(PD) | IFD | 10 | mA |
| Operating Temperature | To | -10~+40 | °C |
| Storage Temperature | Ts | -40~+85 | °C |

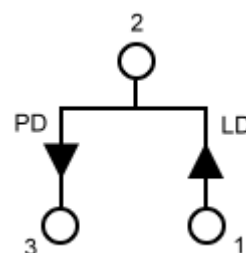


LS-D6-4-658-50

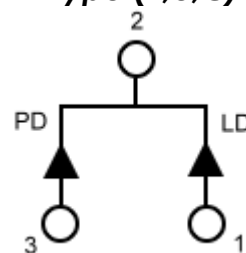
Electrical Connection



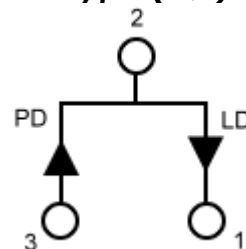
Package Type



P type (P,U,C)



M type (M,R)



N type (N,L,A)

Egismos

<http://www.egismos.com>

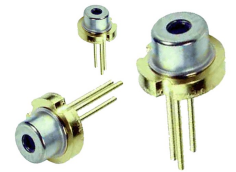
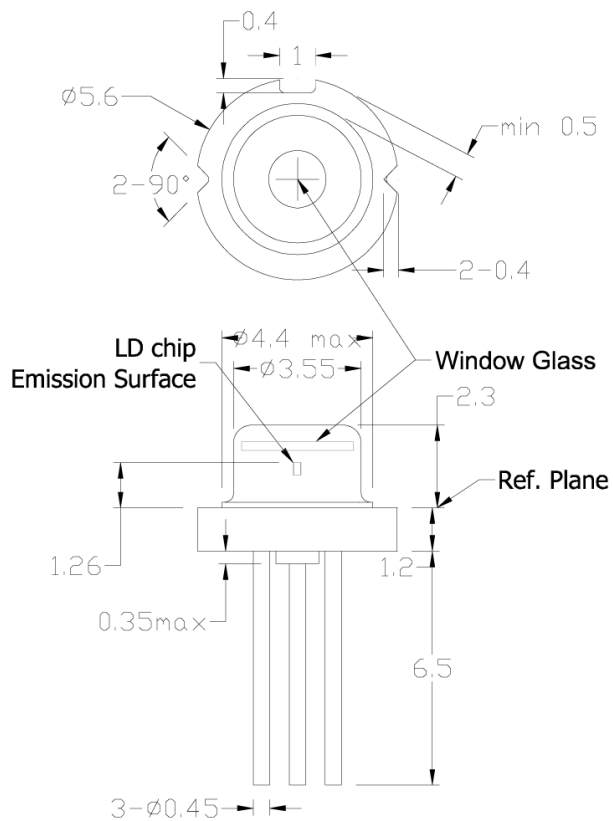
TEL:+1-888-3481454

FAX:+1-604-4339864

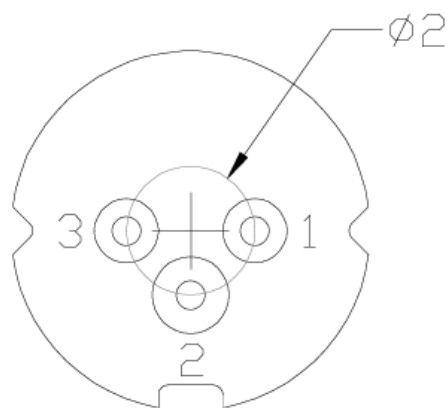
E-Mail:sales@eGismos.com

Egismos *DATASHEET*

Laser Diode Package Drawing



RS-D6-7-660-50



Egismos

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