

# Egismos DATASHEET

## 850nm Compact Laser Diode Modules Key features

Visible light  $\lambda = 850\text{nm}$   
 Output powers = 20mW  
 Package type = 5.6mm $\phi$   
 High reliability

### Applications

General Purpose Infrared Red Laser Light Source  
 Optical Communication & Infrared Red Laser Module for Industry Application  
 Military Application & Optical Sensor Application of Engineering Instruments

### Laser Diode Solutions

SS-D6-6-855-20 is a MOCVD grown 850nm band laser diode. It's an attractive light source, with a typical light output power of CW 20mW. It's suitable for use as high reliability laser diode in a wide range of industrial application.



SS-D6-6-855-20

## Electrical and Optical Characteristics at Tc=25°C

Item	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	20	-	mW	-
Threshold Current	Ith	5	20	35	mA	-
Operating Current	Iop	40	55	70	mA	Po=20mW
Slope Efficiency	SE	0.4	0.5	0.9	mW/mA	10~20mW
Operating Voltage	Vop	-	2.0	2.5	V	Po=20mW
Peak Wavelength	$\lambda_p$	845	855	865	nm	Po=20mW
Beam Divergence	$\Theta_{//}$	7	9	12	deg	Po=20mW
	$\Theta_{\perp}$	25	32	40	deg	Po=20mW
Beam Angle	$\Delta\Theta_{//}$	-	-	$\pm 2.0$	deg	Po=20mW
	$\Delta\Theta_{\perp}$	-	-	$\pm 3.0$	deg	Po=20mW
Monitor Current	Im	0.1	0.6	1.0	mA	Po=20mW
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	$\pm 60$	$\mu\text{m}$	
Astigmatism	As	-	-	15	$\mu\text{m}$	

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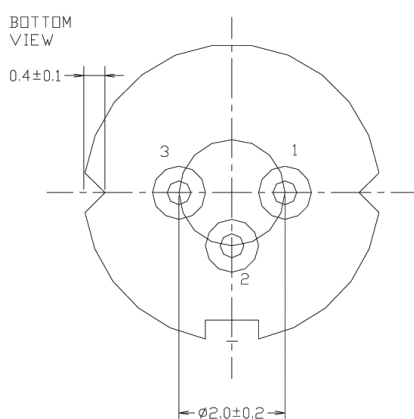
## Absolute Maximum Rating at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	Po	22	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

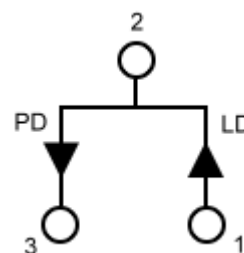


SS-D6-6-855-20

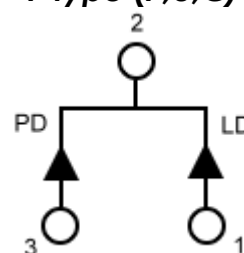
## Electrical Connection



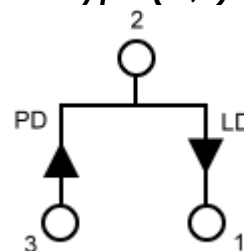
## Package Type



**P type (P,U,C)**



**M type (M,R)**



**N type (N,L,A)**

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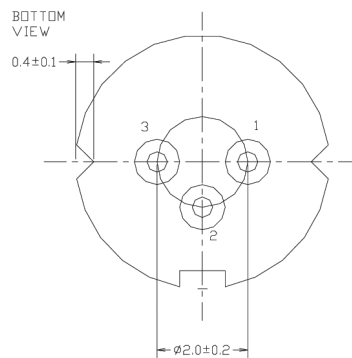
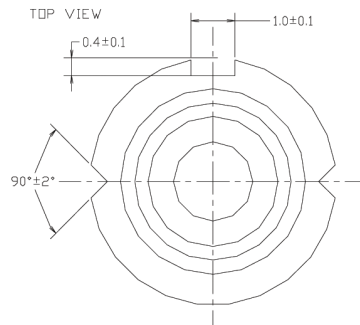
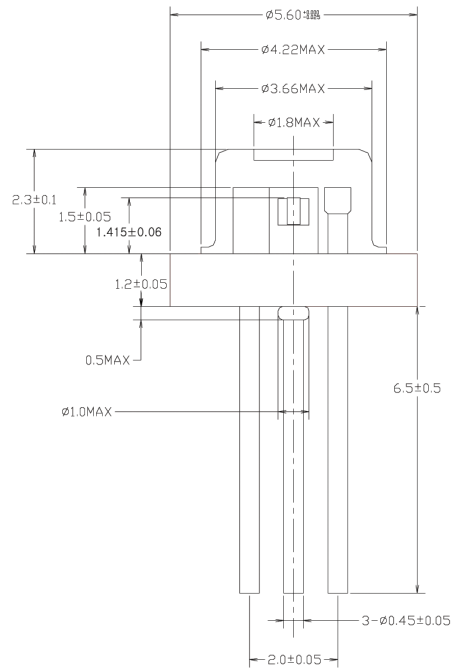
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## Laser Diode Package Drawing



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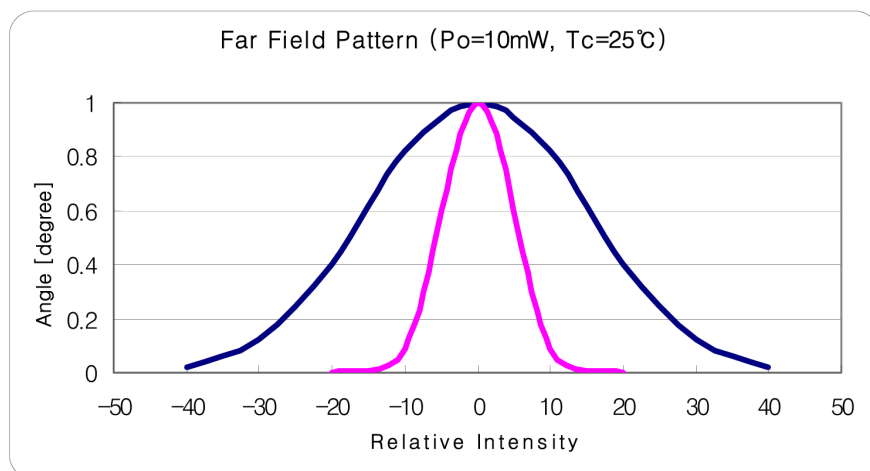
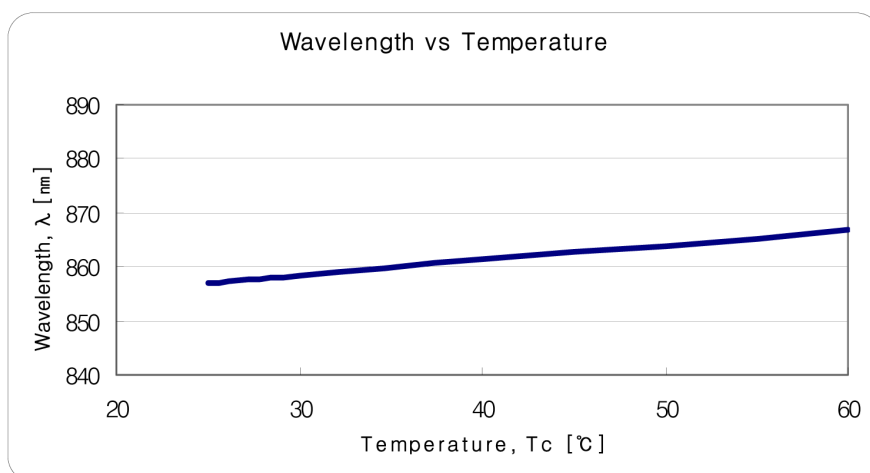
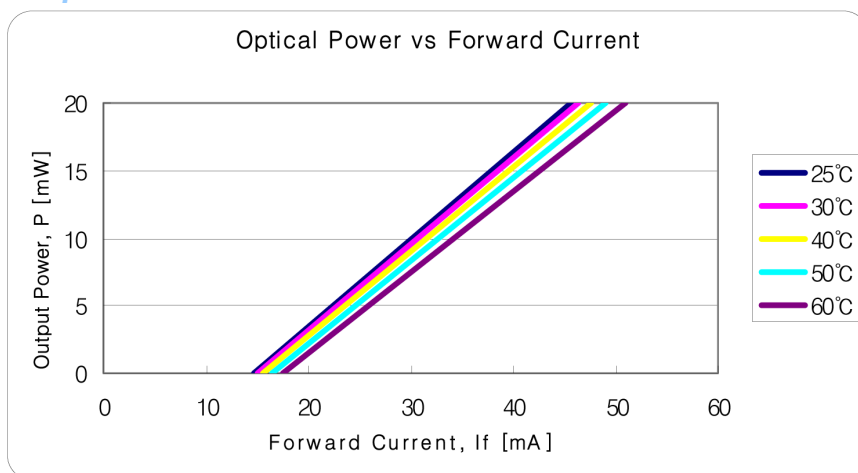
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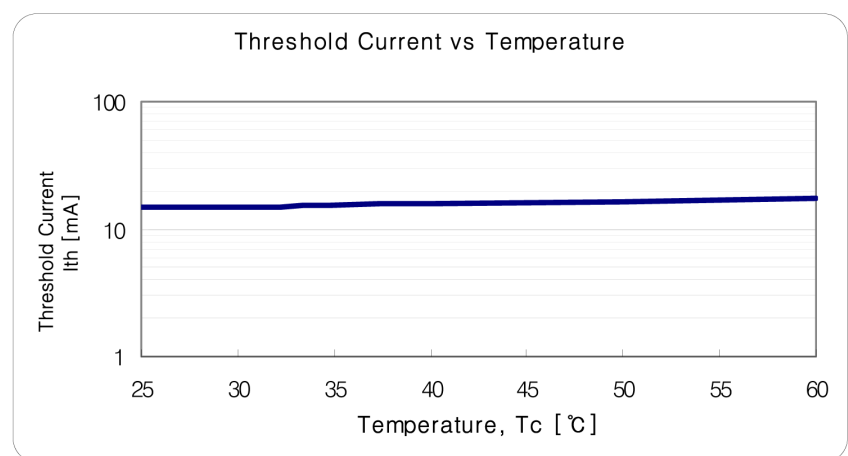
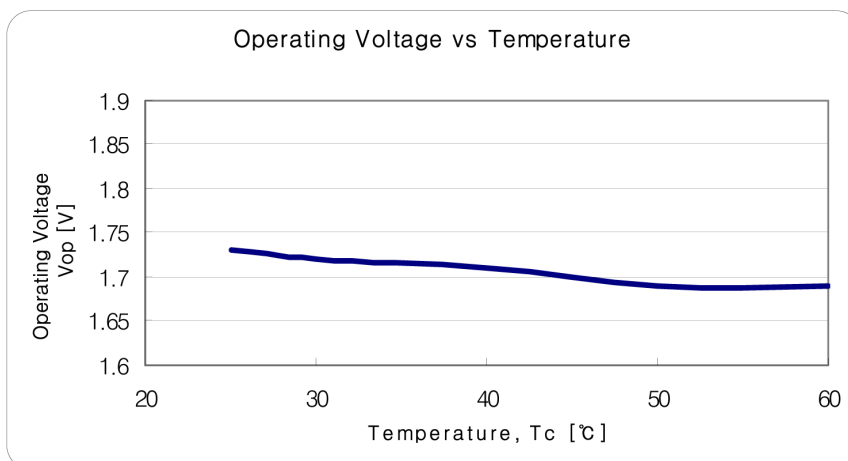
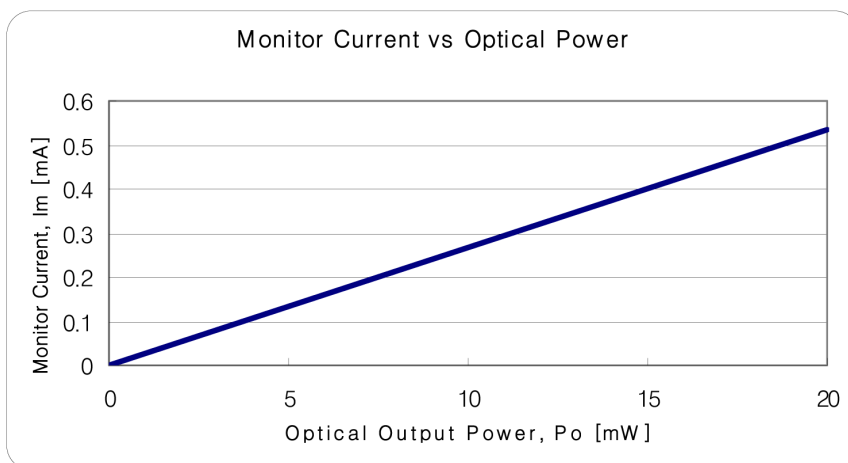
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## Example of Representative Characteristics I



# Egismos *DATASHEET*

## Example of Representative Characteristics II



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