

EGISMOS *DATASHEET*

850nm Compact Laser Diode Modules Key features

Visible light $\lambda = 850\text{nm}$
 Output powers = 10mW
 Package type = 5.6mm ϕ
 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-D6-6-850-10 is a MOCVD grown 850nm band laser diode. It's an attractive light source, with a typical light output power of CW 10mW. It's suitable for use as high reliability laser diode in a wide range of industrial application.



SS-D6-6-850-10

Electrical and Optical Characteristics at Tc=25°C

Item	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	10	-	mW	-
Threshold Current	Ith	5	10	20	mA	-
Operating Current	Iop	15	25	35	mA	Po=10mW
Slope Efficiency	SE	0.4	0.7	0.9	mW/mA	5~10mW
Operating Voltage	Vop	-	1.9	2.5	V	Po=10mW
Peak Wavelength	λ_p	845	850	855	nm	Po=10mW
Beam Divergence	$\Theta_{//}$	7	9	12	deg	Po=10mW
	Θ_{\perp}	25	32	40	deg	Po=10mW
Beam Angle	$\Delta\Theta_{//}$	-	-	± 2.0	deg	Po=10mW
	$\Delta\Theta_{\perp}$	-	-	± 3.0	deg	Po=10mW
Monitor Current	Im	0.1	0.3	0.5	mA	Po=10mW
Optical Distance	$\Delta X, \Delta Y, \Delta Z$	-	-	± 60	μm	
Astigmatism	As	-	-	15	μm	

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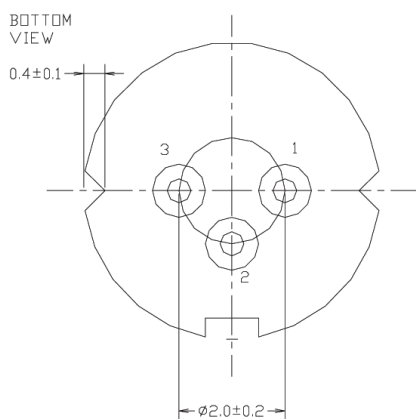
Absolute Maximum Rating at Tc=25°C

Items	Symbols	Values	Unit
Optical Output Power	Po	12	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

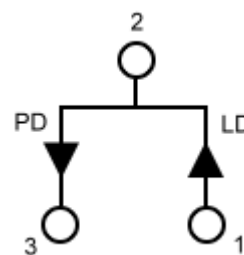


SS-D6-6-850-10

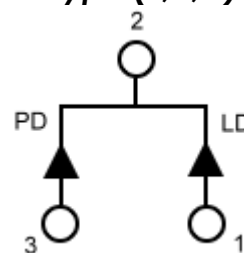
Electrical Connection



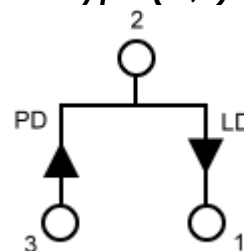
Package Type



P type (P,U,C)



M type (M,R)



N type (N,L,A)

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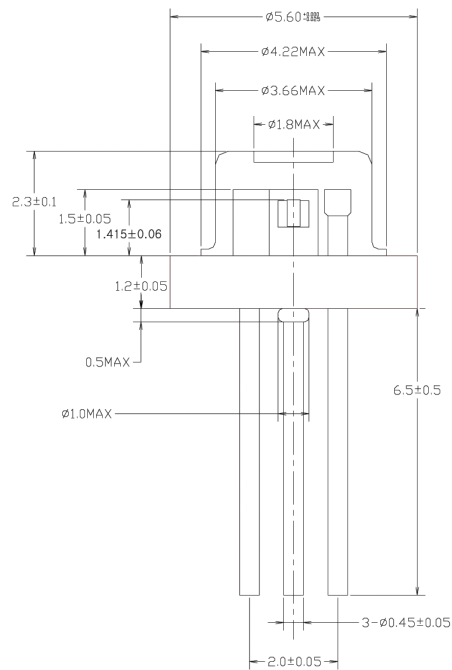
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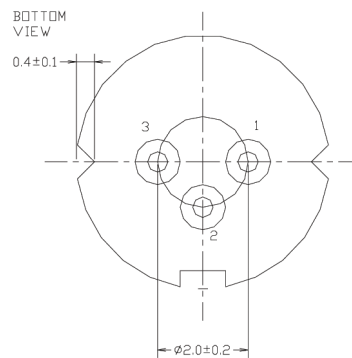
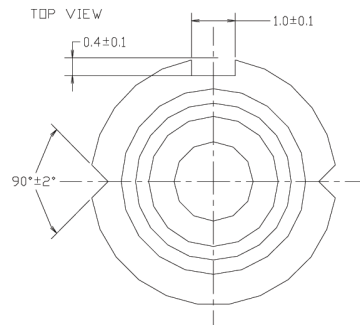
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Laser Diode Package Drawing



SS-D6-6-850-10



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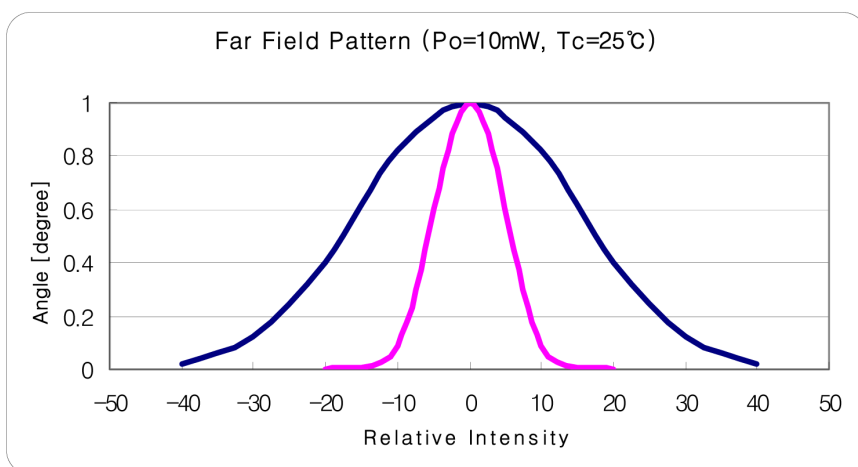
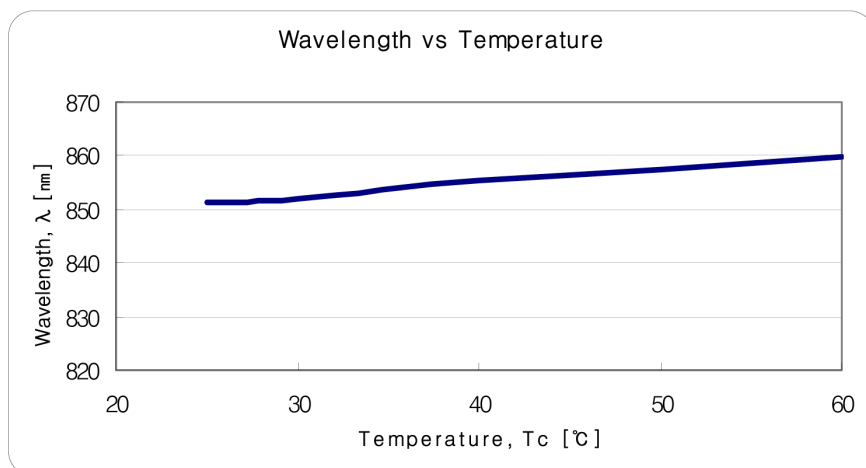
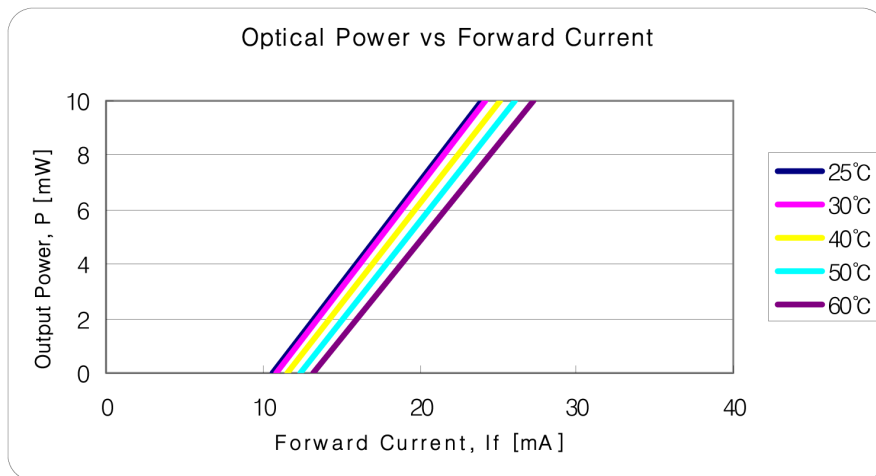
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Example of Representative Characteristics I



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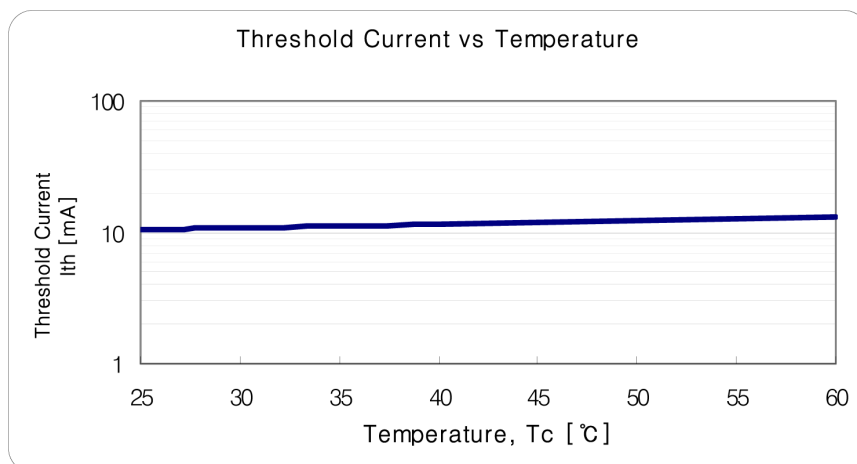
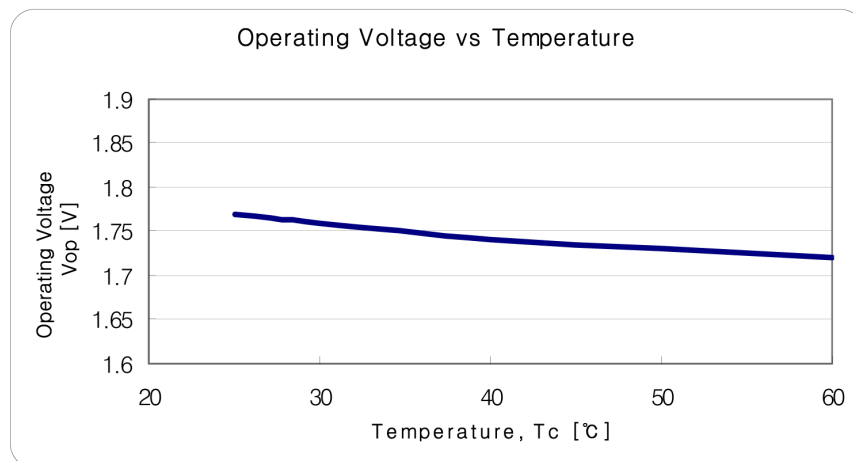
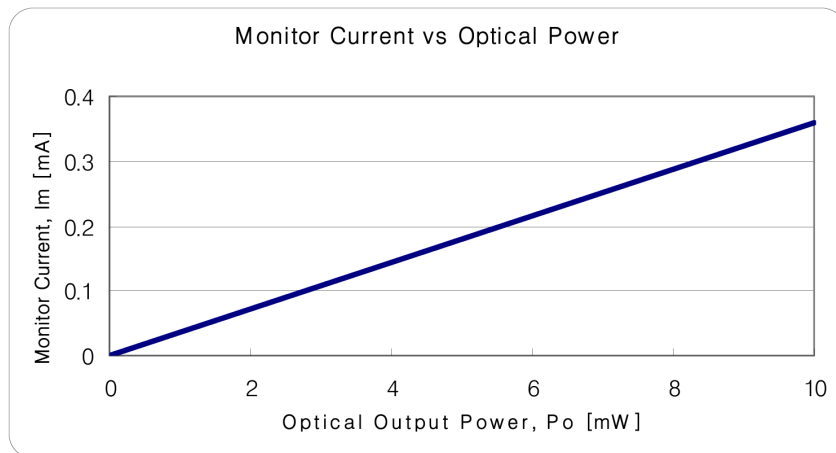
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Example of Representative Characteristics II



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