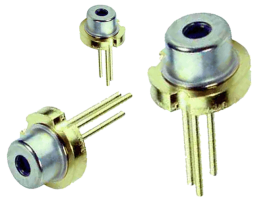
CS4050205M

406nm Compact Laser Diode Key features



Visible light λ= 405nm
Output powers =20mW
Package type=5.6mmΦ
High reliability

Applications

Blu-ray Disc/HD DVD drive
Other new application

Laser Diode Solutions

CS4051205X is a MOCVD grown 405nm band InGaAs 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.

Electrical and Optical Characteristics at Tc=25℃

Item	Symbols	Min.	Typ.	Max.	Unit	Condition
Optical Output Power	Po	-	20	-	mW	-
Threshold Current	Ith	-	26	50	mA	Po=10mW
Operating Current	Iop	-	35	60	mA	Po=10mW
Differential Efficiency	η	0.7	1.1	-	mW/mA	Po=10mW
Operating Voltage	Vop	-	4.8	5.6	V	Po=10mW
Peak Wavelength	λ p	395	405	415	nm	Po=10mW
Monitoring Output Current	Im	0.1	0.2	0.5	mA	Po=10mW
Beam Divergence	Θ//	6.0	8.5	12.0	deg	Po=10mW
	$\Theta_{\perp}$	16	19	23	deg	Po=10mW
Beam Angle	$\triangle\Theta_{//}$	-2	-	+2	deg	Po=10mW
	$\triangle\Theta_{\perp}$	-2	-	+2	deg	Po=10mW

** Angle at 50% peak intensity (full-width at half-maximum)*
** Parallel to the junction plane (X-Z plane)*
Perpendicular to the junction plane(Y-Z plane)

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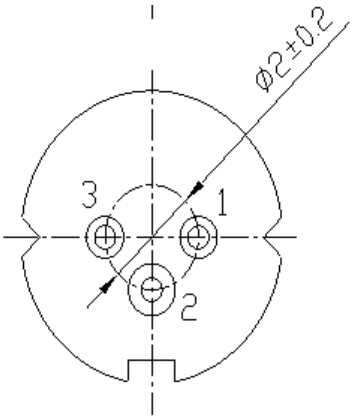
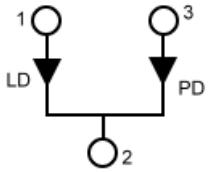
Absolute Maximum Rating at Tc=25℃

Items	Symbols	Values	Unit
Optical Output Power	Po	20	mW
Laser Diode Reverse Voltage	V	2	V
Operating Temperature	To	-0~+75	℃
Storage Temperature	Ts	-40~+85	℃

Electrical Connection

Package Type





M type(M,R)

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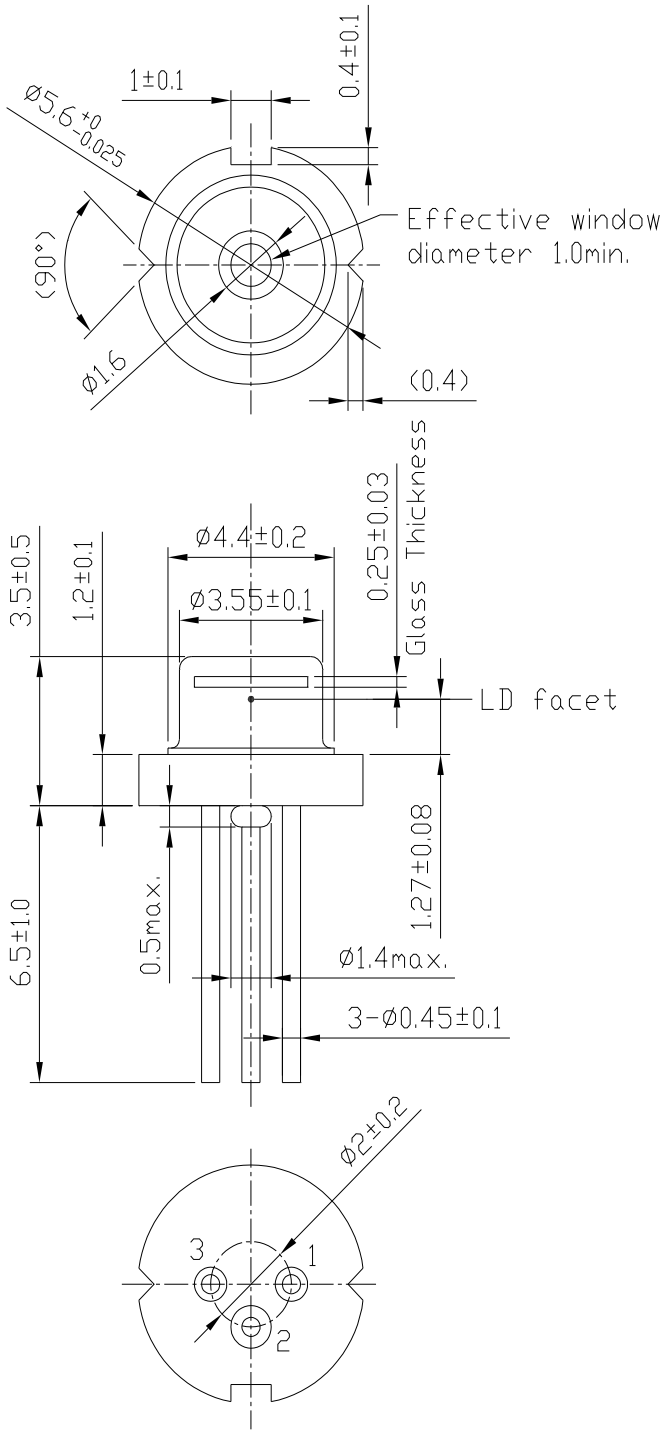
Laser Diode Package Drawing



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