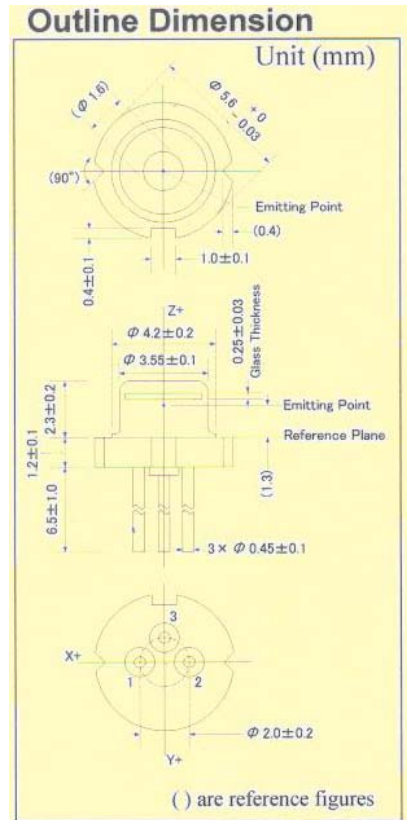
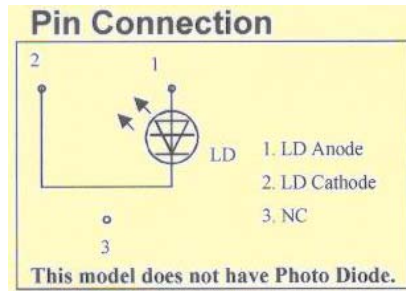




# LD405-100-1

## ● Specifications:

Wavelength: 405nm  
 Power: 100mW CW  
 180mW Pulse  
 Package: TO18



## ● Absolute Maximum Ratings( $T_c=25^\circ\text{C}$ ):

Parameter		Symbols	Ratings	Units
Light Output	CW	$P_{oc}$	120	mW
	Pulse	$P_{op}$	200*	mW
Reverse Voltage	Laser	$V_r$	2	V
Operation Temperature		$T_{op}$	-10~+80	$^\circ\text{C}$
Storage Temperature		$T_{stg}$	-40~+85	$^\circ\text{C}$

\*Pulse Condition: Pulse width 30ns, Duty 50%

## ● Electrical and Optical Characteristics( $T_c=25^\circ\text{C}$ ):

Parameter		Symbols	Condition	Min.	Typ.	Max.	Unit
Output Power		$P_o$	CW	-	-	100	mW
Lasing Wavelength		$\lambda_p$	$P_o=100\text{mW}$	400	405	410	nm
Operating Current		$I_{op}$	$P_o=100\text{mW}$	-	100	130	mA
Operating voltage		$V_{op}$	$P_o=100\text{mW}$	-	4.6	5.5	V
Threshold Current		$I_{th}$	CW	-	35	50	mA
Slope Efficiency		$\eta$	CW	1.2	1.4	1.9	mW/mA
Beam <sup>1)</sup> Divergence	Parallel	$\theta_{//}$	$P_o=100\text{mW}$	7.0	9.0	12.0	deg.
	Perpendicular	$\theta_{\perp}$	$P_o=100\text{mW}$	15.0	19.5	23.0	deg.
Emission Point Accuracy	Angle	$\Delta\theta_{//}$	$P_o=100\text{mW}$	-	-	+/-2	deg.
		$\Delta\theta_{\perp}$	$P_o=100\text{mW}$	-	-	+/-2.5	deg.

1) Full angle at half Maximum