

405nm, 120mw, TO18 package

Application :

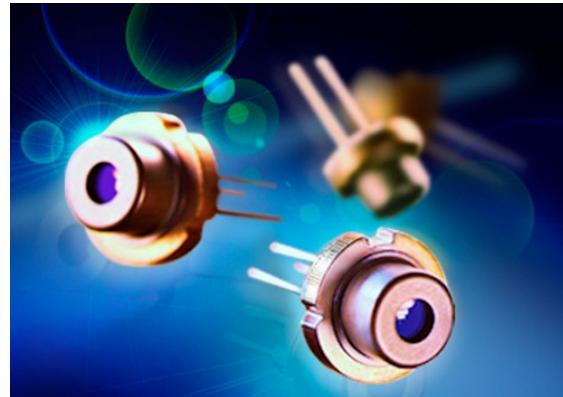
Industrial use / Biomedical

Property :

Wavelength Range = 405nm

Introduction :

Typical emission wavelength at 405nm and it is a efficient radiation source for cw and pulsed operation.



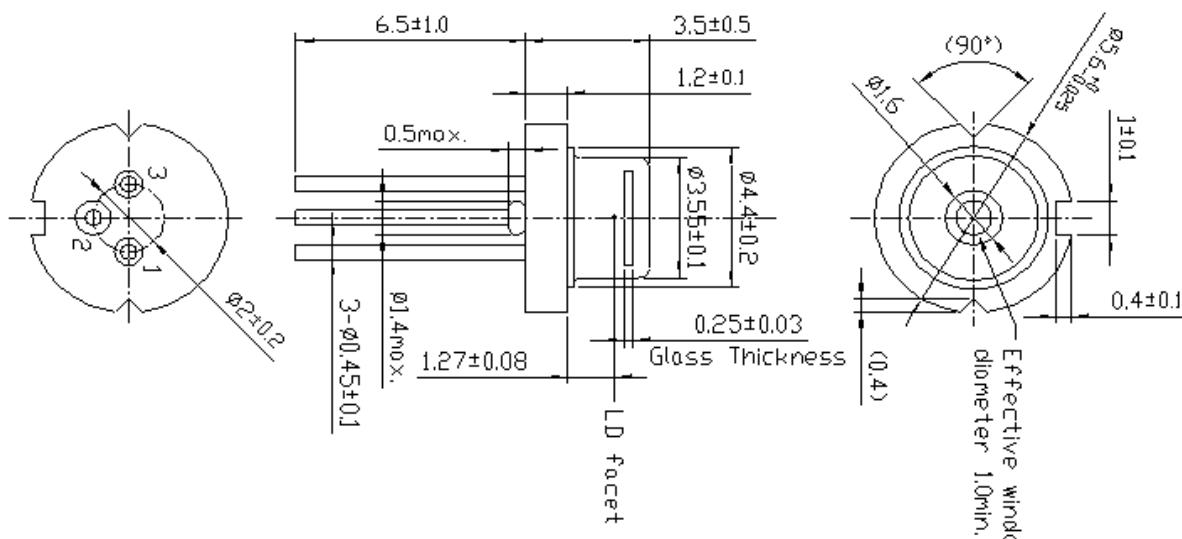
Laser Characteristics (T=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Emission Wavelength	λ_p	405	406	415	nm	$P_o=120mW$
Optical Output power	P_o	-	120	-	mW	-
Threshold Current	I_{th}	-	35	50	mA	-
Operating Current	I_{op}	-	100	115	mA	$P_o=120mW$
Operating Voltage	V_{op}	-	4.8	5.5	V	$P_o=120mW$
Beam Divergence	$\Theta_{//}$	6	9	14	deg	$P_o=120mW$
	Θ_{\perp}	16	20	24	deg	$P_o=120mW$
Beam Deviation Angle	$\Delta\Theta_{//}$	-3	-	3	deg	$P_o=120mW$
	$\Delta\Theta_{\perp}$	-3	-	3	deg	$P_o=120mW$

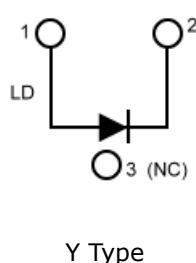
Maximum Rating

Parameter	Symbol	Value	Unit
Reverse Voltage	V	5	V
Operating Temperature	T_o	0~+70	°C
Storage Temperature	T_s	-40~+85	°C

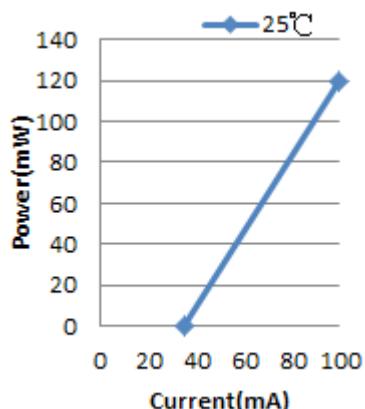
Package Outlines :



Package Connection :



Optical Output Power vs Forward Current



Caution :

- The forward voltage to drive the optical output power of an LD fluctuates with temperature. High temperature compromises optical efficiency of an LD and thus results in even more operating current to support constant output optical power.
- The reliability of LDs is influenced by Static electricity or electrical surges. Wrist strap or anti-electrostatic glove are recommended to use when picking up LDs.

Certification :

