

LASER DIODE

SD405nm-100mw

Features

- Wavelength : 405nm(Typ.)
- Output power : 100mW
- Threshold current : $I_{th}=110\text{mA}$ (Typ.)
- Package : $\phi 5.6\text{mm}$ with PD

Applications

- Lasermodule
- IndustrialUse

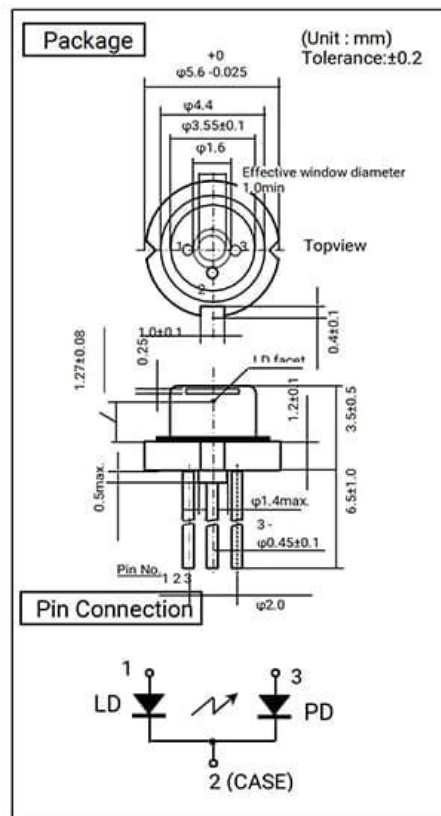
Absolute Maximum Ratings

Absolute Maximum Ratings

($T_c=25^\circ\text{C}$)

Parameter	Symbol	Ratings	Unit
Light Output	Po(CW)	100	mW
Reverse Voltage (LD)	VR	2	V
Operating Temperature ¹⁾	Topr	0 to +75	$^\circ\text{C}$
Storage Temperature ¹⁾	Tstg	-40 to +85	$^\circ\text{C}$

1) Casetemperature.



Electrical and Optical Characteristics ²⁾³⁾⁴⁾⁵⁾

Electrical and Optical Characteristics

($T_c=25^\circ\text{C}$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	I_{th}	CW	-	26	60	mA
Operating Current	I_{op}	$P_o=100\text{mw}$	-	110	130	mA
Operating Voltage	V_{op}	$P_o=100\text{mw}$	-	4.8	5.6	V
Lasing Wavelength	λ_p	$P_o=100\text{mw}$	400	405	410	nm
Beam ⁶⁾ Divergence	Perpendicular	Q_v	$P_o=100\text{mw}$	16	19	$^\circ$
	Parallel	Q_h	$P_o=100\text{mw}$	6	8.5	$^\circ$
Off Axis Angle	Perpendicular	dQ_v	$P_o=100\text{mw}$	-3	-	$^\circ$
	Parallel	dQ_h	$P_o=100\text{mw}$	-3	-	$^\circ$
Differential Efficiency	SE	$P_o=100\text{mw}$	0.7	1.1	-	mW/mA
Monitoring Output Current	I_m	$P_o=100\text{mw}$	0.1	0.2	0.5	mA