

INFRARED LASER DIODE

DL-7141-035

SANYO

Ver.1 Oct. 2003

Features

- Lasing wavelength : 808 nm (Typ.)
- Single longitudinal mode
- High output power : 100 mW at 50°C
- Low threshold current : $I_{th} = 40$ mA (Typ.)
- Fundamental transverse mode
- Small package : $\phi 5.6$ mm

Applications

- Solid state laser pumping

Absolute Maximum Ratings

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

Parameter		Symbol	Ratings	Unit
Light Output	CW	P_o	110	mW
Reverse Voltage	Laser	VR	2	V
	PD		30	
Operating Temperature		T_{opr}	-10 to +50	$^\circ\text{C}$
Storage Temperature		T_{stg}	-40 to +85	$^\circ\text{C}$

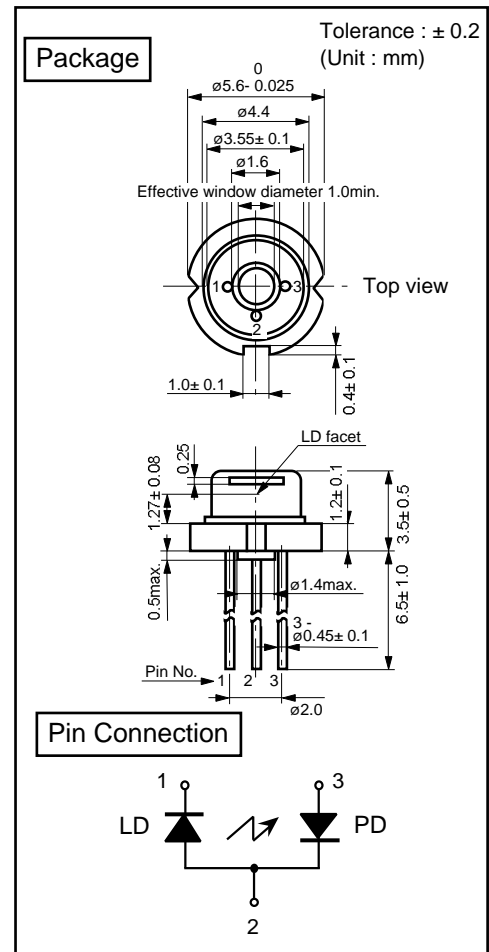
Electrical and Optical Characteristics ^{1) 2)}

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

Parameter		Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current		I_{th}	CW	-	40	60	mA
Operating Current		I_{op}	$P_o=100\text{mW}$	-	125	160	mA
Operating Voltage		V_{op}	$P_o=100\text{mW}$	-	2.0	2.4	V
Lasing Wavelength *		L_p	$P_o=100\text{mW}$	798	808	818	nm
Beam ³⁾ Divergence	Perpendicular	Q_v	$P_o=100\text{mW}$	12	16	20	$^\circ$
	Parallel	Q_h	$P_o=100\text{mW}$	6	8	10	$^\circ$
Off Axis Angle	Perpendicular	dQ_v	-	-	-	± 3	$^\circ$
	Parallel	dQ_h	-	-	-	± 3	$^\circ$
Differential Efficiency		dP_o/dI_{op}	-	0.8	1.2	-	mW/mA
Monitoring Output Current		I_m	$P_o=100\text{mW}$	0.1	0.3	0.6	mA
Astigmatism		A_s	$P_o=100\text{mW}$	-	3	-	μm

- 1) Initial values 2) All the above values are evaluated with Tottori Sanyo's measuring apparatus
3) Full angle at half maximum

Note : The above product specification are subject to change without notice.



* Lasing Wavelength Selection Classification

Type	Lasing Wavelength (nm)
DL-7141-035A	808 ± 3
DL-7141-035B	808 ± 5
DL-7141-035C	808 ± 10