

## Features

- Wavelength : 790 nm (Typ.)
- Frame type : compact, light weight, thin package
- Output Power : 5mW
- Low threshold current :  $I_{th} = 20$  mA (Typ.)
- PIN photodiode built-in for light output monitor

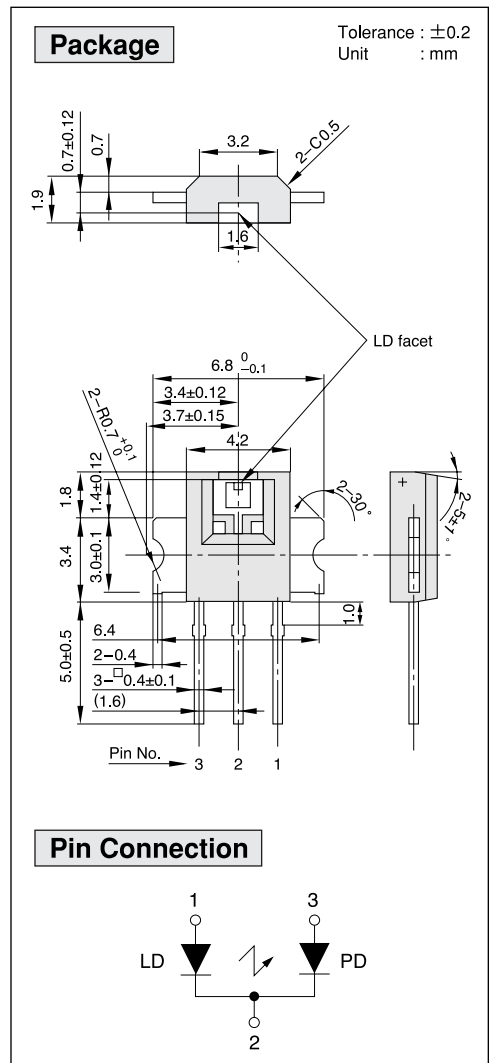
## Applications

- CD, CD-ROM, VD

## Absolute Maximum Ratings

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

Parameter	Symbol	Ratings	Unit	
Light Output	CW	$P_o$	7	mW
Reverse Voltage	LD	$V_R$	2	V
	PD		30	
Operating Temperature	$T_{opr}$	-10 to +70	$^\circ\text{C}$	
Storage Temperature	$T_{stg}$	-40 to +85	$^\circ\text{C}$	



## Electrical and Optical Characteristics <sup>1) 2)</sup>

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Threshold Current	$I_{th}$	CW	—	20	35	mA
Operating Current	$I_{op}$	$P_o=5\text{mW}$	—	30	45	mA
Operating Voltage	$V_{op}$	$P_o=5\text{mW}$	—	1.8	2.3	V
Lasing Wavelength	$\lambda_p$	$P_o=5\text{mW}$	—	790	805	nm
Beam Divergence <sup>3)</sup>	Perpendicular	$\theta_{\perp}$	25	35	45	$^\circ$
	Parallel	$\theta_{\parallel}$	8	10.5	14	$^\circ$
Off Axis Angle	Perpendicular	$\Delta\theta_{\perp}$	—	—	$\pm 3$	$^\circ$
	Parallel	$\Delta\theta_{\parallel}$	—	—	$\pm 2$	$^\circ$
Differential Efficiency	$dP_o/dI_{op}$	—	0.3	—	—	mW/mA
Monitoring Output Current	$I_m$	$P_o=5\text{mW}$	0.07	0.3	0.7	mA
Astigmatism	$A_s$	$P_o=5\text{mW}$	—	18	—	$\mu\text{m}$

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 specifications are subject to change without notice.