

## LT056PS/MS

## Red Laser Diode

### Compact Laser Diode for DVD-ROM(650nm-5mW)

#### General Description

Sharp's red laser diode LT056PS/LT056MS have been developed for DVD-ROM that will bring a great hope to visual media of the next generation.

#### Model Name

- LT056PS ---Single power supply
- LT056MS---Dual power supply

#### Features

- (1) Maximum optical output : 5mW
- (2) Wavelength: 650nm
- (3) Compact  $\phi 5.6$ mm package
- (4) Stable transverse mode
- (5) High temperature operation at 70°C
- (6) Realizes short wave laser diode by introducing a tensile strain into the multi-quantum well active layer.
- (7) Stable optical characteristics by developing an index guide structure of MBE method 2 times growth
- (8) Pair use with Sharp's OPIC\* light detector IS1630 is recommended.

\*OPIC : OPIC (Optical IC) is a trademark of the SHARP Corporation.  
An OPIC consists of a light-detecting element and signal-processing circuit integrated onto a single chip.

#### Applications

- DVD-ROM drives
- DVD players
- Bar code readers
- Pointers etc.

#### Specifications

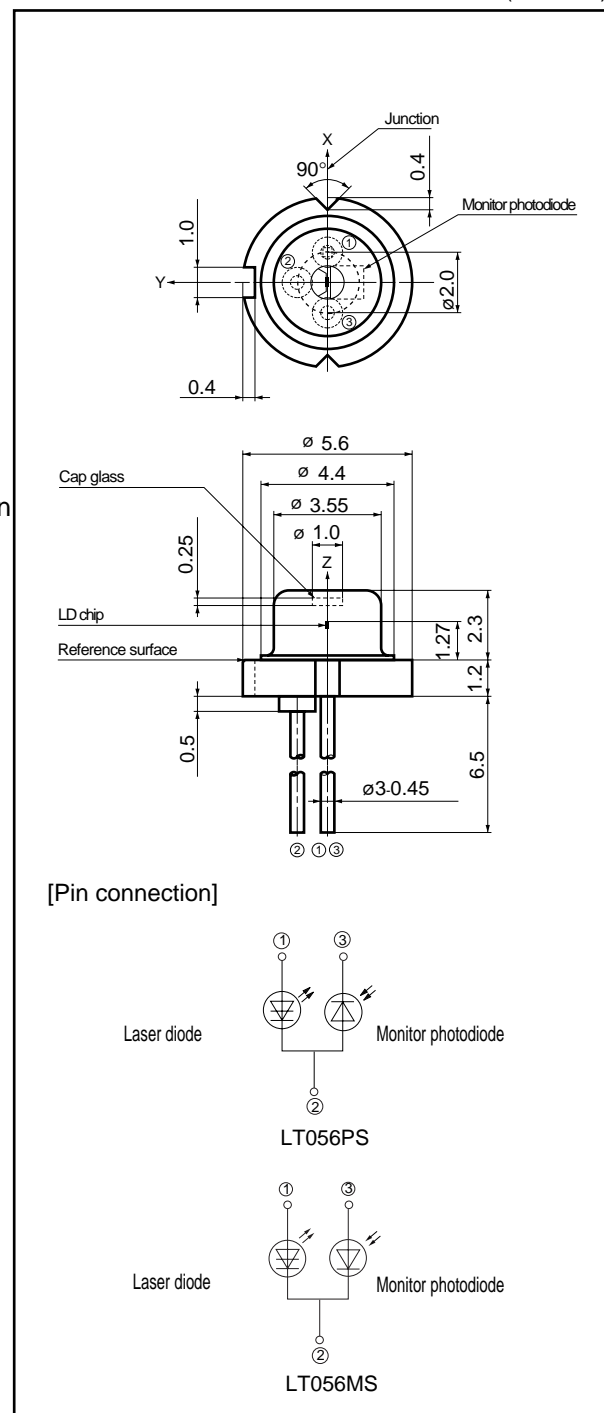
##### Electro-optical characteristics

(Tc=25°C, Po=3mW)

Parameter	Symbol	Rating(TYP.)
Optical power output	Po	MAX. 5 mW
Wavelength	lp	650 nm
Threshold current	Ith	60 mA
Operating current	Iop	70 mA
Operating voltage	Vop	2.5 V
Radiation angle	Parallel	$\theta_{  }$ 8°
	Perpendicular	$\theta_{\perp}$ 33°
Operating temperature	Topt	-10 to 70°C

#### Outline Dimensions

(Unit:mm)



(Notice) • In the absence of device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

• Specifications are subject to change without notice for improvement.

(Internet) • Data for Sharp's optoelectronic/power devices is provided for internet. ( Address <http://www.sharp.co.jp/ecg/>)