

GH5RB11A3CR

High Power Hologram Laser

Sample Holding Method Applicable High Power Hologram Laser for $\times 16$ Speed Write CD-R

Features

- (1) High power (pulse MAX. 144 mW*1)
- (2) For $\times 16$ speed write CD-R,
for $\times 40$ speed read CD-ROM
(With built-in MIN. 45 MHz OPIC*)
- (3) Sample holding method (tracking method)
applicable
- (4) Capable of connecting with chip set for general use
- (5) High coupling efficiency
The ellipticity ($\theta \perp / \theta \parallel$) is close to 1
- (6) $\phi 4.8$ mm thickness package
- (7) Built in beam splitter and diffraction grating
function

* OPIC 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

- (1) CD-R drives
- (2) CD-RW drives

Absolute Maximum Ratings

Electro-optical characteristics of laser diode ($T_c = 25^\circ\text{C}$)

Parameter	Conditions	Ratings
Optical power output	—	MAX. 101 mW*1
Optical power output (pulse)		MAX. 144 mW*1
Threshold current	—	TYP. 30 mA
Operating current	$P_o = 90\text{ mW}$	TYP. 130 mA
Operating voltage		TYP. 2.2 V
Wavelength	$P_o = 100\text{ mW}$	773 to 797 nm
Half intensity angle	Parallel	TYP. 9°
	Perpendicular	TYP. 17°
Operating temperature (pulse)	0 to $+70^\circ\text{C}$	

*1 Output power from hologram laser

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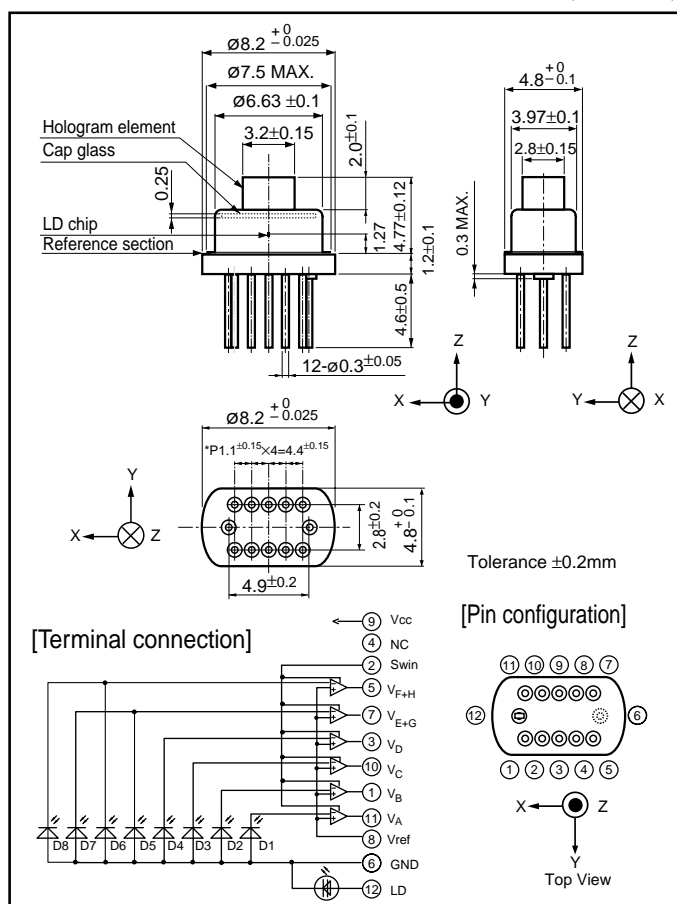
- Specifications are subject to change without notice for improvement.

(Internet)

- Data for Sharp's optoelectronic/power devices is provided on internet. (Address <http://sharp-world.com/ecg/>)

Outline Dimensions

(Unit: mm)



Electrical characteristics of hologram laser ($T_c = 25^\circ\text{C}$)

Parameter	Conditions	Ratings
RF output amplitude	Collimated lens output power 1.5 mW, High gain	TYP. 0.94 V
FES output amplitude		TYP. 0.59 V
RES output amplitude		TYP. 0.19 V
Focal offset		MAX. $\pm 0.7 \mu\text{m}$
OPIC operating voltage	—	TYP. 5 V
OPIC response frequency	Main	Common to high/low gain
	Sub	Low gain
		MIN. 45 MHz
		MIN. 16 MHz

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