## SHARP GH0781JA2C GH0781JA6C

Under development

New product

High Power Laser Diode

High Power Laser Diode for ×32 Speed Write CD-R

## Features

- (1) High power (pulse MAX.180 mW)
- (2) For  $\times$ 32 speed write CD-R
- (3) High couping efficiency
- The epllipticity  $(\theta \perp / \theta / )$  is cose to 1
- (4) Operating temperature (pulse) : MAX. 75°C
- (5) GH0781JA2C : Ø 5.6 mm packageGH0781JA6C :Bottom cut Ø 5.6 mm package suitable for slim drive

Applications

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



## Specifications

					(1	$c_{-23} C$
Parameter			Symbol	Conditions	Ratings	Unit
Optical power output			Ро	_	MAX. 120	mW
Optical power output(pulse)			Рр		MAX. 180	
Threshold current			Ith	-	TYP. 30	mA
Operating current			Iop	Po= 100 mW	TYP. 141	mA
Operating voltage			Vop		MAX. 2.1	V
Wavelength			λp		780 to 787	nm
Half intensity angle	Parallel		θ //	100 11 11	TYP. 8.7	0
	Perpendicular		$\theta \perp$		TYP. 16	
Rise time			Tr	10% - 90%	TYP. 0.8	ns
Operating	CW		Topc(c)	-10 to +65		°C
temperatur	e	Pulse	Topp(c)	-10 to +70		Ũ

・当製品は、輸出貿易管理令別表第1に該当致します。輸出する場合は、輸出許可の取得等必要な手続きを行ってください。

•This product comes under "The first" on another table of Export trading control low. In case of export, go through the necessary formalities such as aquisition of export license.

-25°C

(Notice)

•In the absence of confirmation by 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 is provided on internet. (Address http://sharp-world.com/ecg/)

As of August 2001

## NOTICE

The circuit application examples in this publication are provided to explain representative applications of SHARP devices and are not intended to guarantee any circuit design or license any intellectual property rights. SHARP takes no responsibility for any problems related to any intellectual property right of a third party resulting from the use of SHARP's devices.

Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device. SHARP reserves the right to make changes in the specifications, characteristics, data, materials, structure, and other contents described herein at any time without notice in order to improve design or reliability. Manufacturing locations are also subject to change without notice.

Observe the following points when using any devices in this publication. SHARP takes no responsibility for damage caused by improper use of the devices which does not meet the conditions and absolute maximum ratings to be used specified in the relevant specification sheet nor meet the following conditions:

(i) The devices in this publication are designed for use in general electronic equipment designs such as:

- Personal computers
- Office automation equipment
- Telecommunication equipment [terminal]
- Test and measurement equipment
- Industrial control
- Audio visual equipment
- Consumer electronics

(ii)Measures such as fail-safe function and redundant design should be taken to ensure reliability and safety when SHARP devices are used for or in connection with equipment that requires higher reliability such as:

- Transportation control and safety equipment (i.e., aircraft, trains, automobiles, etc.)
- Traffic signals
- Gas leakage sensor breakers
- Alarm equipment
- Various safety devices, etc.

(iii)SHARP devices shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as:

- Space applications
- Telecommunication equipment [trunk lines]
- Nuclear power control equipment

- Medical and other life support equipment (e.g., scuba).

Contact a SHARP representative in advance when intending to use SHARP devices for any "specific" applications other than those recommended by SHARP or when it is unclear which category mentioned above controls the intended use.

If the SHARP devices listed in this publication fall within the scope of strategic products described in the Foreign Exchange and Foreign Trade Control Law of Japan, it is necessary to obtain approval to export such SHARP devices.

This publication is the proprietary product of SHARP and is copyrighted, with all rights reserved. Under the copyright laws, no part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, in whole or in part, without the express written permission of SHARP. Express written permission is also required before any use of this publication may be made by a third party.

Contact and consult with a SHARP representative if there are any questions about the contents of this publication.