

# 8W 976nm CW Single Emitter Diode Laser Chip

## Overview:

8W output power, 976nm central wavelength

CW working mode, 1 emitter on the chip, TE polarization mode

The conversion efficiency of our chip can reach 60%



New epitaxial structure design and material epitaxy

## Advantage:

Long lifetime > 10000 hours

High Reliability and stability

Single Emitter Laser Chip

## Application:

Fiber laser pumping source

Autonomous Driving Lidar

Direct Semiconductor Laser

Laser illumination

## Data Sheet

Item No: LC976SE8

Item Name: 8W 976nm CW Single Emitter Diode Laser Chip

<b>Optical</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>
Central Wavelength	966nm	976nm	986nm
Output Power		8W	
Working Mode		CW	
Spectrum Width		3nm	
Number of Emitter		1	
Emitter Width		95um	
Emitter Pitch		400um	
Filling Factor		50%	
Cavity Length	3990	4000um	4010
Thickness	110um	130um	150um
Fast Axis Divergence(FWHM)		36Deg	40Deg
Slow Axis Divergence (FWHM)		10Deg	12Deg
Polarization Mode		TE	
Slope Efficiency	0.95W/A	1W/A	
<b>Electrical</b>			
Operating Current Iop		10A	11A
Threshold Current Ith		0.7A	1A
Operating Voltage Vop		1.75V	2V
Conversion Efficiency	54%	58%	
<b>Thermal</b>			
Operating Temperature	15	25	35
Wavelength Temperature Coefficient		0.28nm/	