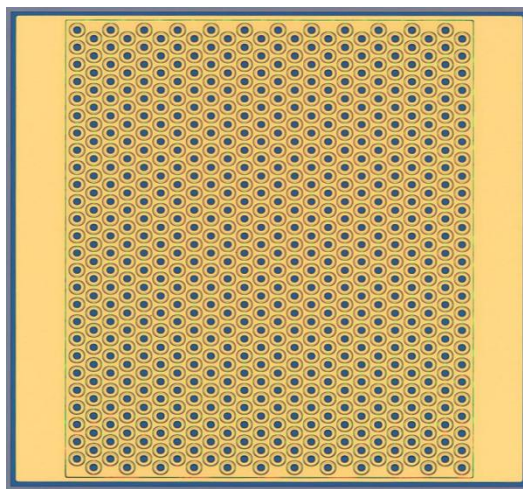


1064nm 3W VCSEL Laser Chip

Part No.: D-V1064M-3000-0043

Suitable for CW or QCW applications and the power is 3W



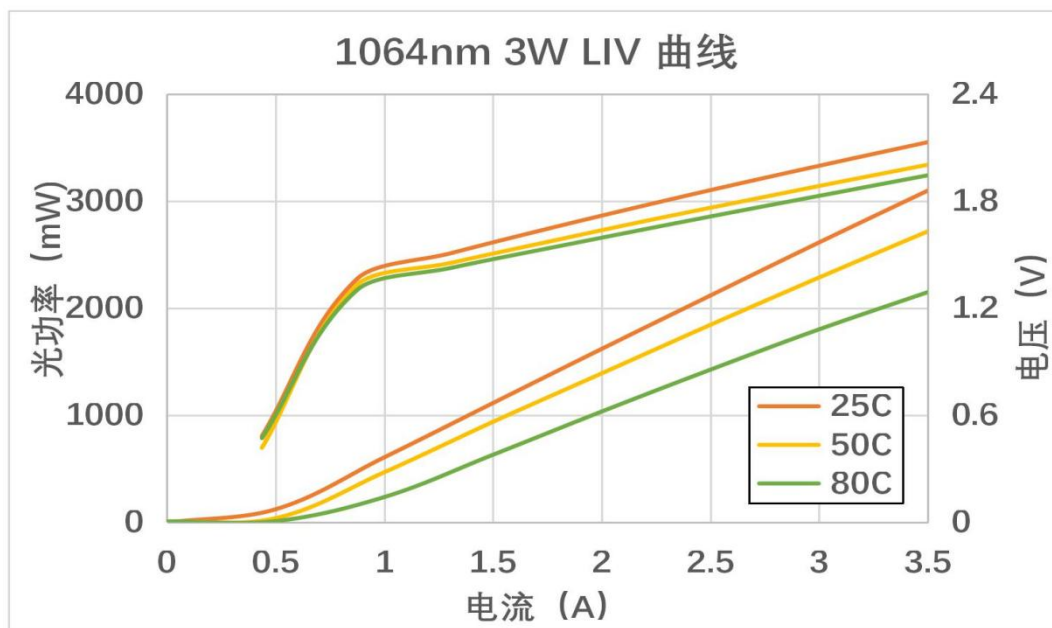
Features

- VCSEL (Vertical-Cavity Surface-Emitting Laser)
- High efficiency and reliability
- Stable central wavelength, narrow line width
- Doughnut shaped, symmetrical far field
- Surface mountable

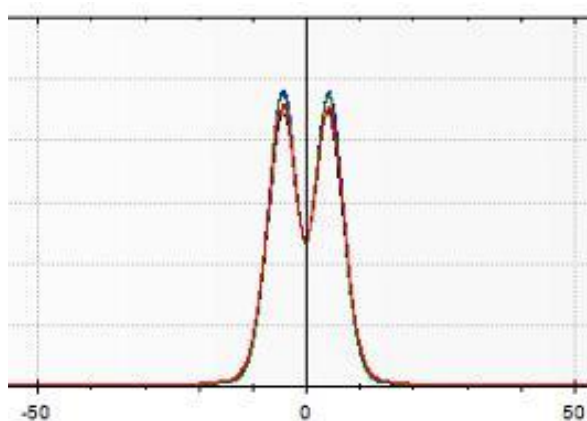
Applications

- Sensor light source
- Consumer electronic products
- Machine vision
- Red lighting
- Industrial

L-I-V Curve



FFDA (Far-Field Divergence Angle) ($\sim 20^\circ$)

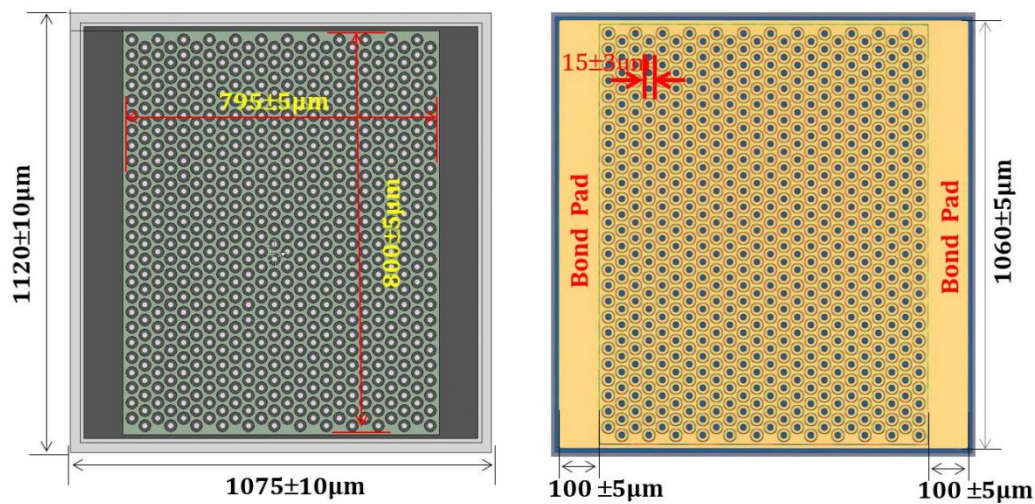


Electrical Optical Characteristics

Parameter	Symbol	Unit	Min.	Typ.	Max	Note
Threshold Current	I _{th}	mA	--	500	650	
Forward Voltage	V _F	V	2.0	2.2	2.4	I _F = 3.5A
Differential Resistance	R _s	Ohms	--	0.2	--	
Slop Efficiency	SE	W/A	1.0	1.1	--	
Output Power	P _{op}	mW	2900	3100	--	I _F = 3.5A
Power Conversion Efficiency	PCE	%	38	41	--	I _F = 3.5A
Wavelength	λ _{op}	nm	1060	1064	1074	
Divergence Angle(1/e ²)		deg	18	20	22	I _F = 3.5A

25°C, QCW Model

Mechanical Specifications



参数 Parameter	规格 Specification
芯片尺寸 Die size	$1075 \pm 10 \mu\text{m} \times 1120 \pm 10 \mu\text{m}$
芯片厚度 Die Thickness	$125 \pm 5 \mu\text{m}$
光孔数目 Number of Emitters	624
焊盘尺寸 (正极) Bond Pad Size (Anode Pad)	$100 \pm 10 \mu\text{m} \times 1060 \pm 10 \mu\text{m} \times 2$
背面电极尺寸 (负极) Back Electrode Size (Cathode Pad)	$1075 \pm 10 \mu\text{m} \times 1120 \pm 10 \mu\text{m}$

