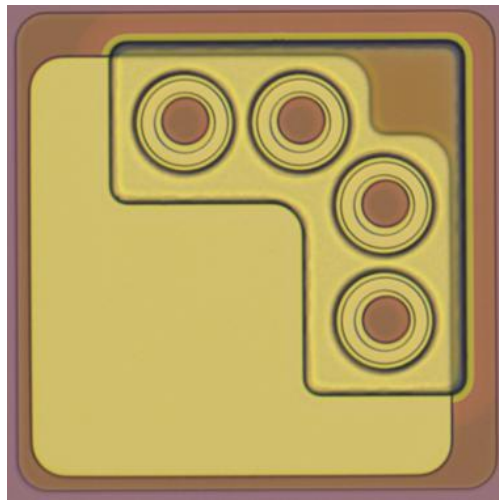


1064nm 20mW VCSEL Laser Chip

Part No.: D-V1064M-0020-0007

Suitable for pulse power applications and the power is 20mW



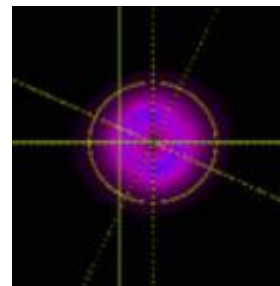
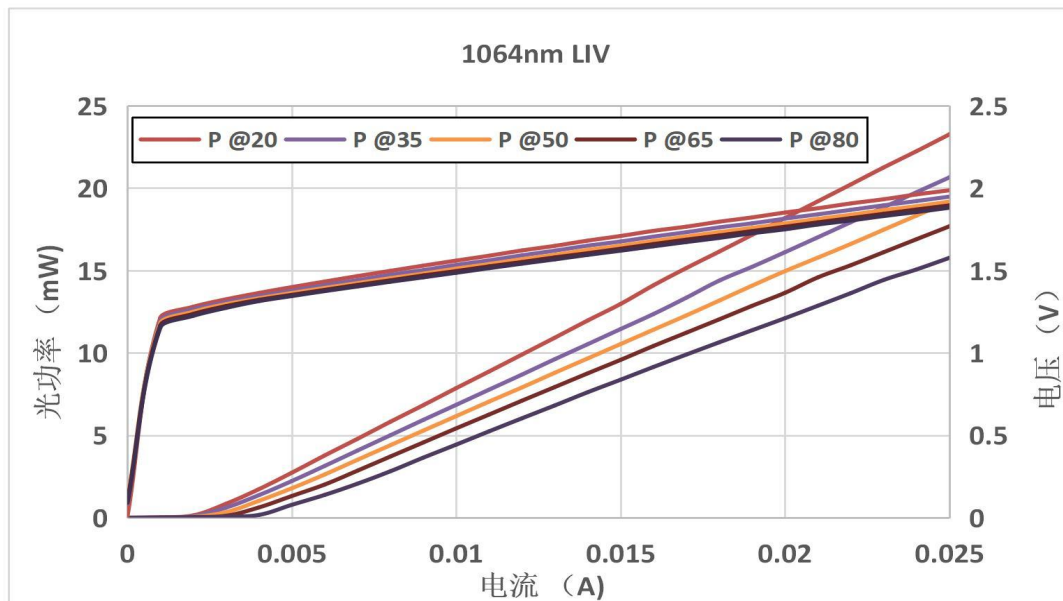
Features

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

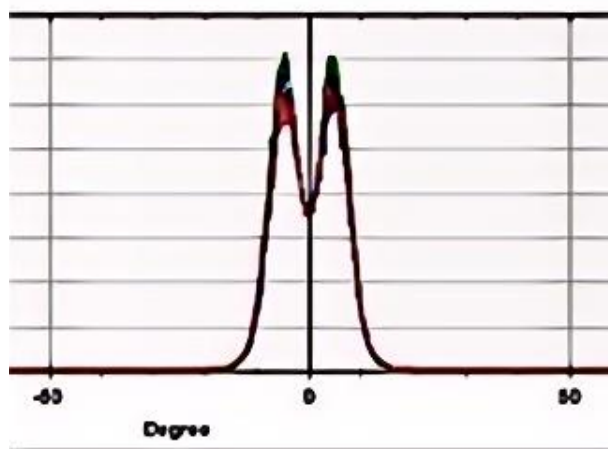
Applications

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

L-I-V Curve



FFDA (Far-Field Divergence Angle)

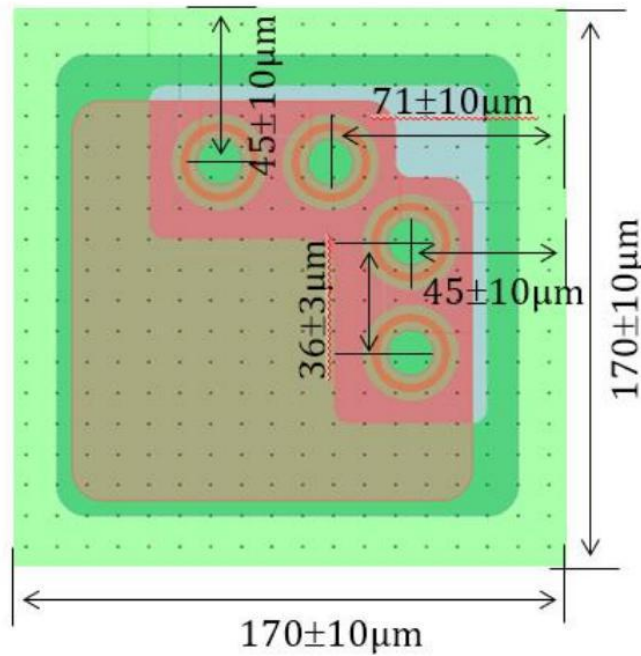


Electrical Optical Characteristics

Parameter	Symbol	Unit	Min.	Typ.	Max	Note
Threshold Current	I _{th}	mA	--	3.0	--	
Forward Voltage	V _F	V	--	2.0	--	IF = 25mA
Slop Efficiency	SE	W/A	0.8	0.9	--	
Output Power	P _{op}	mW	9	20	--	IF = 25mA
Power Conversion Efficiency	PCE	%	--	41	--	IF = 25mA
Wavelength	λ _{op}	nm	1060	1064	--	
Divergence Angle(1/e ²)		deg	--	21	--	IF = 25mA

25°C, QCW Model (Pulse length 0.5ms, 1% Duty Cycle)

Mechanical Specifications



参数 Parameter	规格 Specification
芯片尺寸 Die size	$170 \pm 10 \mu\text{m} \times 170 \pm 10 \mu\text{m}$
芯片厚度 Die Thickness	$130 \pm 10 \mu\text{m}$
光孔数目 Number of Emitters	4
焊盘尺寸 (正极) Bond Pad Size (Anode Pad)	$87 \pm 3 \mu\text{m} \times 85 \pm 3 \mu\text{m}$
背面电极尺寸 (负极) Back Electrode Size (Cathode Pad)	$170 \pm 10 \mu\text{m} * 170 \pm 10 \mu\text{m}$

