

# 670nm 4mW VCSEL Laser Chip

Part No.: D-V0670M-0004-0008

Suitable for pulse power applications and the power is 4mW



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+86 13001193337 sales@deraysemi.com

**BestLaser Opto Component Device Limited**

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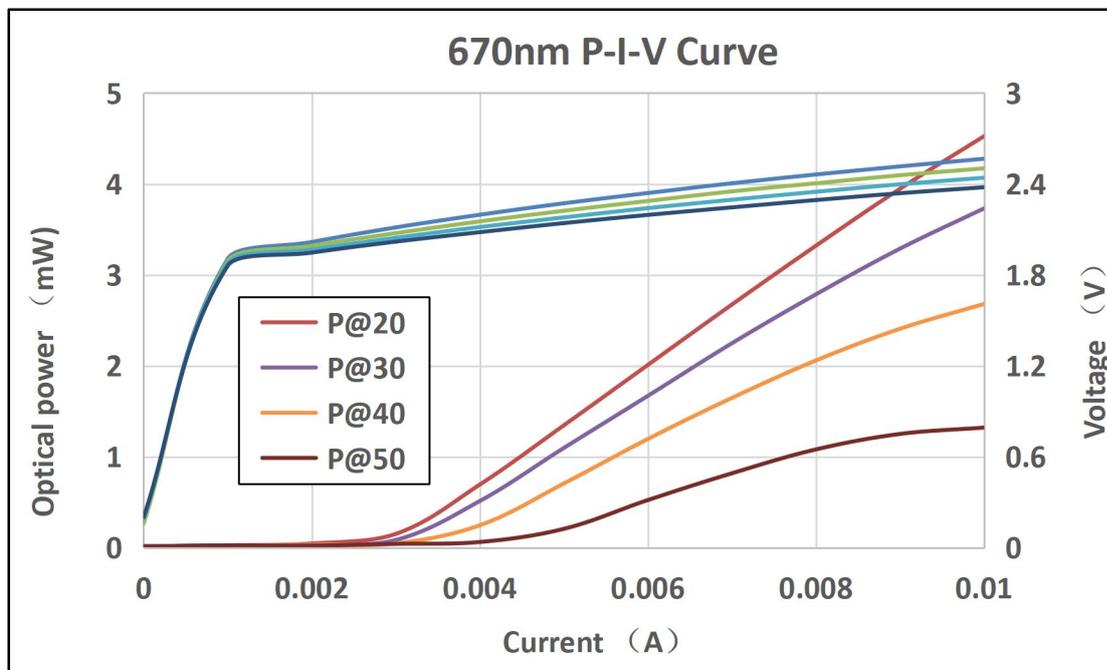
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## Features

- 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



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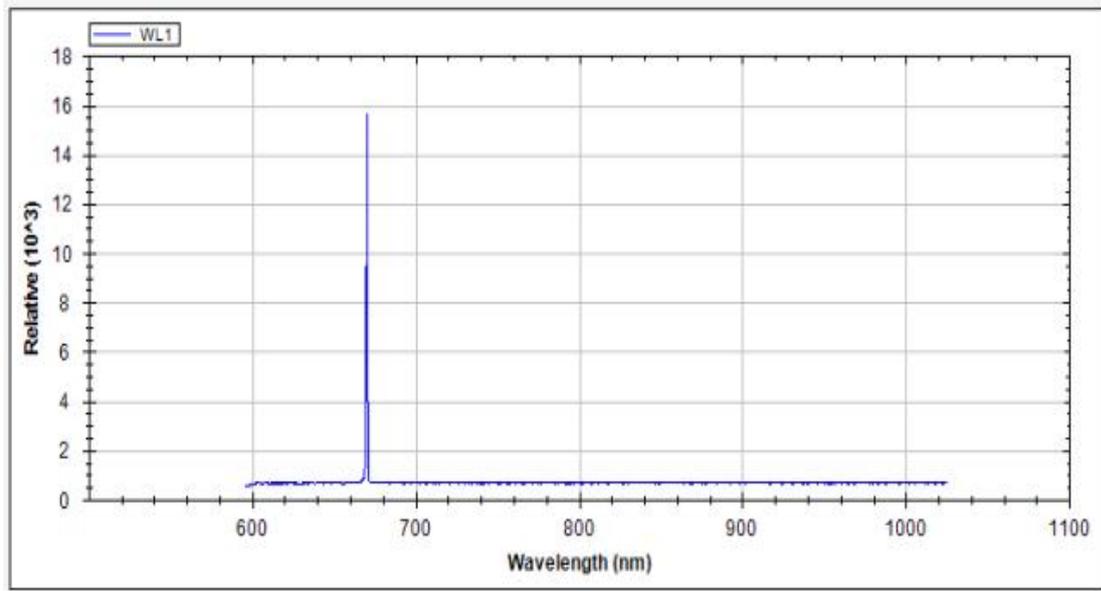
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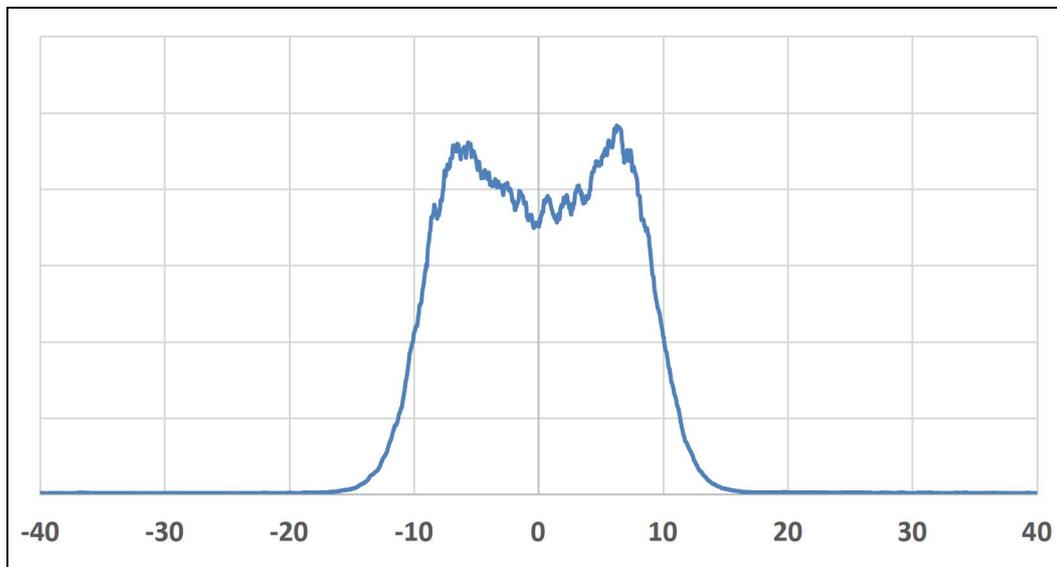
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## Spectroscopy



## FFDA (Far-Field Divergence Angle) ( $\sim 22^\circ$ at 10 mA)



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### Electrical Optical Characteristics

Parameter	Symbol	Unit	Min.	Typ.	Max	Note
Threshold Current	I <sub>th</sub>	mA		2.7		
Forward Voltage	V <sub>F</sub>	V		2.5		IF = 10mA
Output Power	Pop	mW	3.0	4.0		IF = 10mA
Slop Efficiency	SE	W/A	0.4	0.55		
Power Conversion Efficiency	PCE	%		16		IF = 10mA
Wavelength	λ <sub>op</sub>	nm	668	670		
Divergence Angle(1/e <sup>2</sup> )		deg		22		IF = 10mA

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



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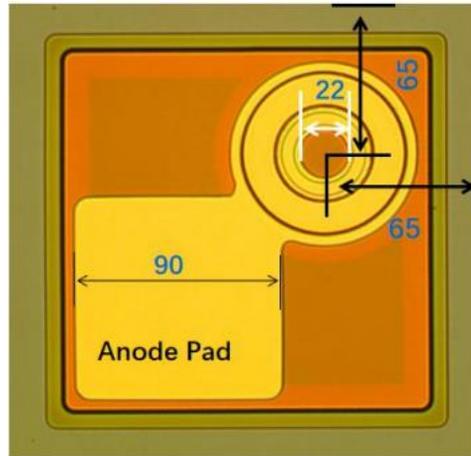
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## Mechanical Specifications



Parameter	Specification
Die size (x/y)	200µm × 200µm
Die Thickness	130µm
Bond Pad Width	90µm × 90µm



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