

808nm 5mW VCSEL Laser Chip

Part No.: D-V0808M-0005-0007

Suitable for pulse power applications and the power is 5mW



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BestLaser Opto Component Device Limited

BestLaser Opto Component Device (EU) Ltd | BestLaser Opto Component Device (NA) Ltd | DERAY Optoelectronics (China)

Empowering Light. Expanding Possibilities.
BestLaser Opto Component Device Limited | Registered in Hong Kong SAR, Business Registration Certificate No. 78803147, Manufacturing & R&D Locations: Shenzhen Nanchang Suzhou Xi'an, D-U-N-S* No. 7723368413 | Legal documents available upon request (Apostilled by Hong Kong High Court).

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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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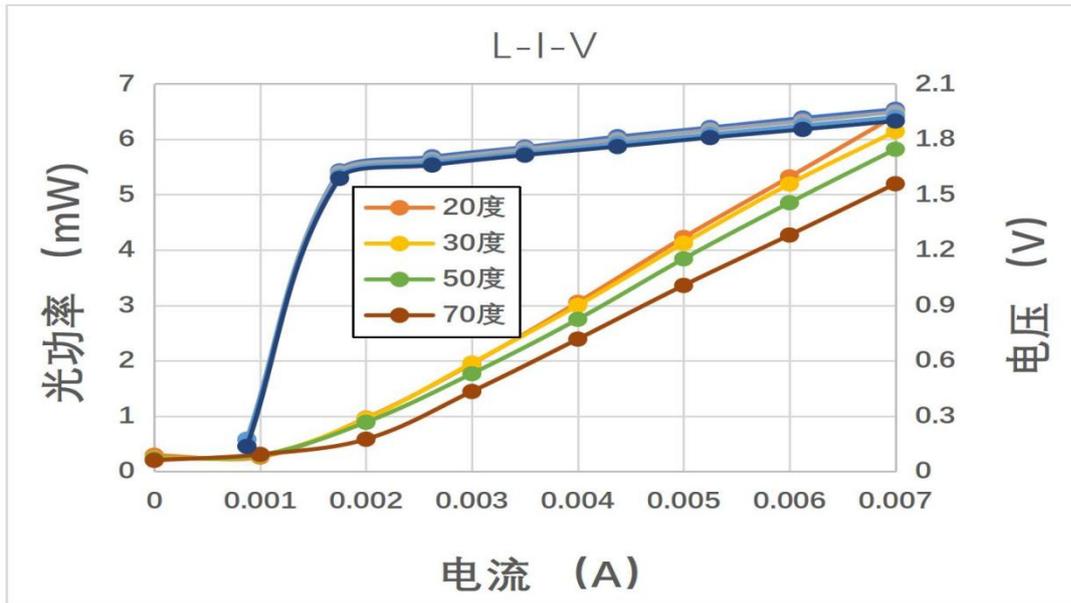
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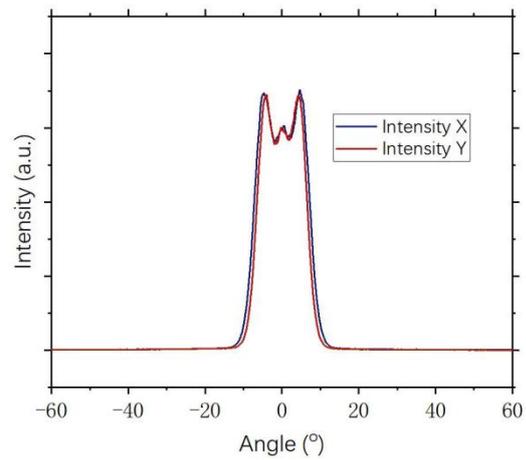
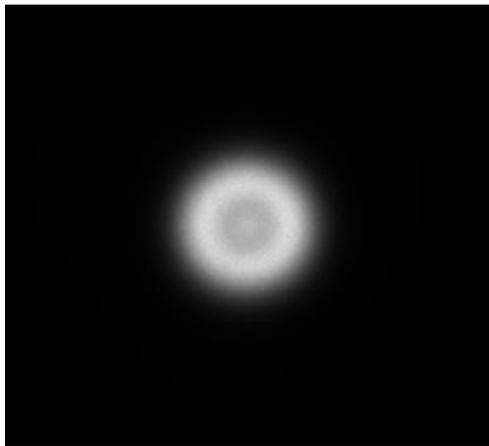
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L-I-V Curve



Far Field profile



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Electrical Optical Characteristics

Parameter	Symbol	Unit	Min.	Typ.	Max	Note
Threshold Current	I _{th}	mA	0.9	1.2	2	
Forward Voltage	V _F	V	1.8	2.0	2.2	IF = 7mA
Differential Resistance	R _s	Ohms	--	75	--	
Slop Efficiency	SE	W/A	1.0	1.1	--	
Output Power	Pop	mW	5.5	6.0	--	IF = 7mA
Power Conversion Efficiency	PCE	%	43	46	--	IF = 7mA
Wavelength	λ _{op}	nm	800	808	816	
Divergence Angle(1/e ²)		deg	18	21	24	IF = 7mA

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



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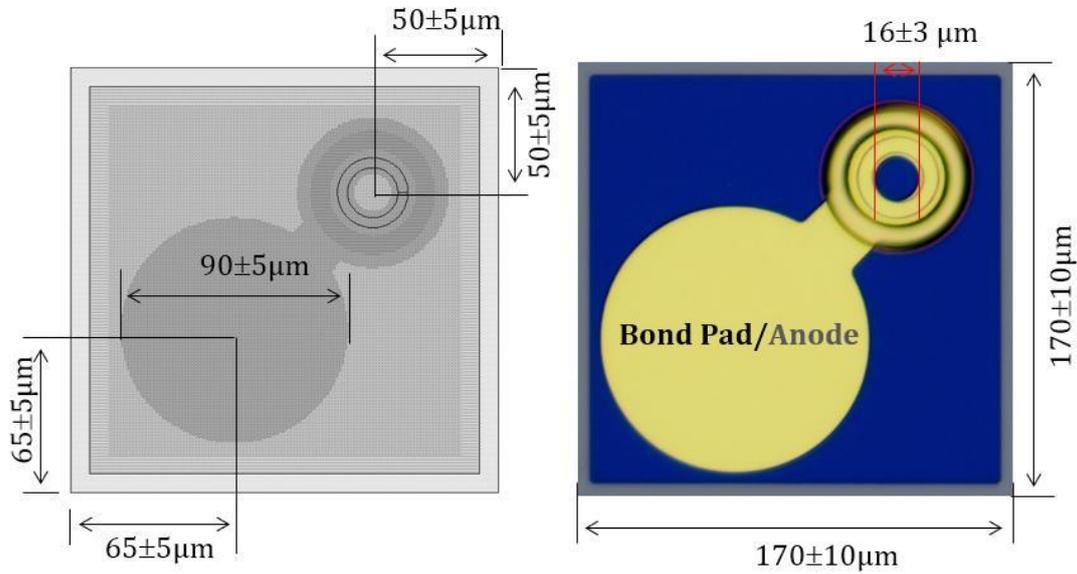
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Mechanical Specifications



Parameter	Specification
Die size	140±10µm × 170±10µm
Die Thickness	130±10µm
Number of Emitters	1
Bond Pad Size(Anode Pad)	90±5µm
Bsck Electrode Size(Cathode Pad)	170±10µm × 170±10µm



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