

905nm 1W 7Mil Multi-Junction VCSEL Laser Chip

Part No.: D-V0905M-1000-0007-06

Suitable for pulse power applications and the power is 1W



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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
- Industrial



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Electrical Optical Characteristics

Parameter	Symbol	Unit	Min.	Typ.	Max	Note
Threshold Current	I _{th}	mA	--	4	10	
Forward Voltage	V _F	V	16	20	25	IF = 200mA
Differential Resistance	R _s	Ohms	40	50	60	
Output Power	Pop	mW	800	1000	--	IF = 200mA
Power Conversion Efficiency	PCE	%	20	26	--	IF = 200mA
Wavelength	λ _{op}	nm	895	905	915	
Divergence Angle(1/e ²)		deg	15	18	22	IF = 200mA

25°C, Pulse Width 5ns, 0.1% Duty Cycle



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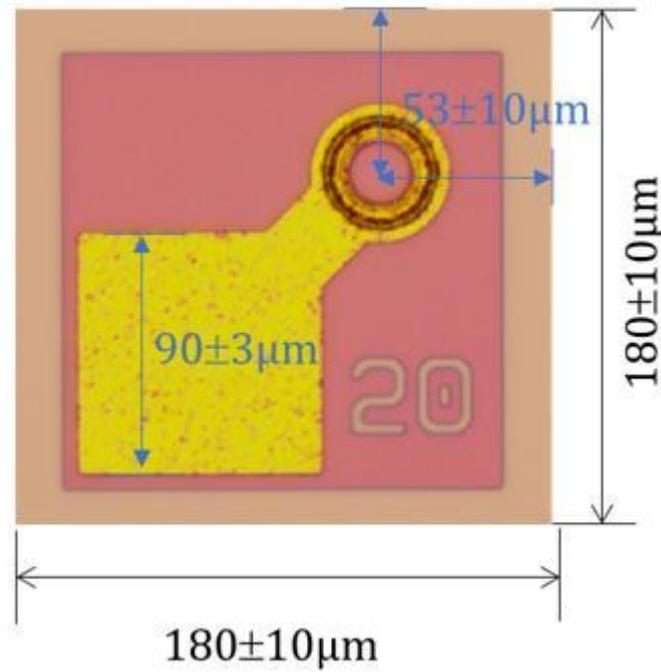
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Mechanical Specifications



Parameter	Specification
Die size	180±10µm × 180±10µm
Die Thickness	150±10µm
Number of Emitters	1
Emitting Aperture	20±1µm



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