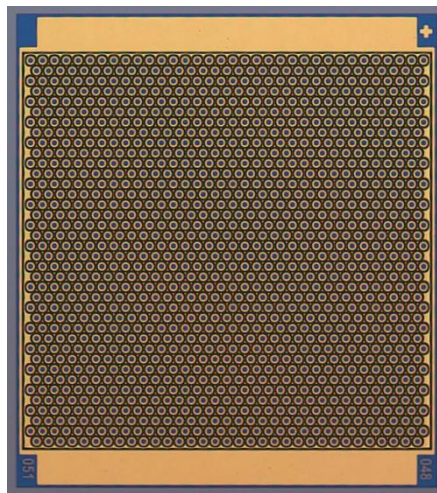


850nm 6W VCSEL Laser Chip

Part No.: D-V0850M-6000-0056

Suitable for pulse power applications and the power is 6W



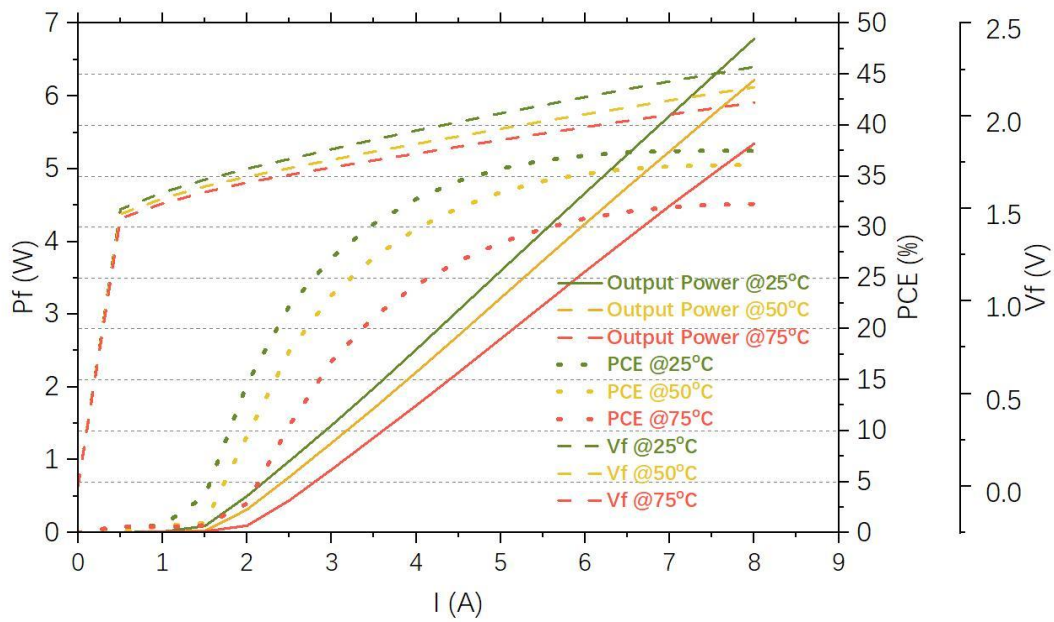
Features

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

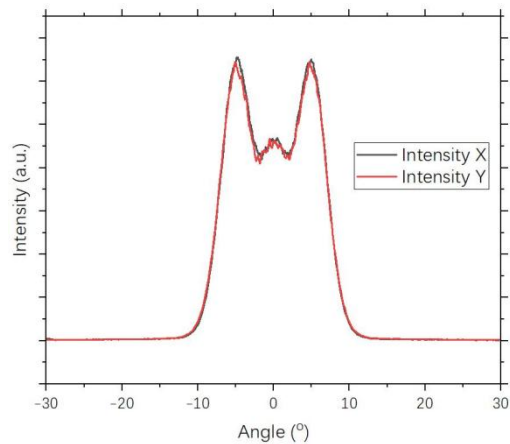
Applications

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

L-I-V Curve



FFDA (Far-Field Divergence Angle)

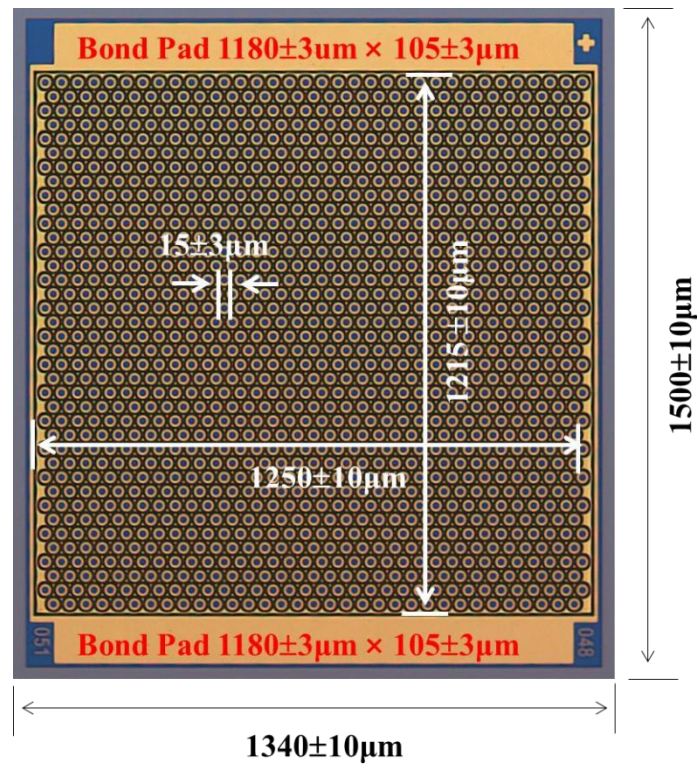


Electrical Optical Characteristics

Parameter	Symbol	Unit	Min.	Typ.	Max	Note
Threshold Current	I _{th}	mA	--	1500	1800	
Forward Voltage	V _F	V	2.0	2.2	2.4	IF = 7A
Differential Resistance	R _s	Ohms	--	0.1	--	
Slop Efficiency	SE	W/A	0.9	1.0	--	
Output Power	Pop	mW	5000	5500	6000	IF = 7A
Power Conversion Efficiency	PCE	%	36	38	--	IF = 7A
Wavelength	λ _{op}	nm	840	850	860	
Divergence Angle(1/e ²)		deg	18	19	23	IF = 7A

25°C, QCW Model (Pulse length 0.1ms, 3% Duty Cycle)

Mechanical Specifications



参数 Parameter	规格 Specification
芯片尺寸 Die size	1340±10μm x 1500±10μm
芯片厚度 Die Thickness	150±10μm
光孔数目 Number of Emitters	1273
焊盘尺寸 (正极) Bond Pad Size (Anode Pad)	1180±3μm x 105±3μm
背面电极尺寸 (负极) Back Electrode Size (Cathode Pad)	1340±10μm x 1500±10μm

