

Data Sheet

660nm 5mW 0402 Module

Dogain Optoelectronic Technology(Suzhou)Co.,Ltd

PN: DG-VP-A660-5mW0402 模组
Rev. 1.0

Feb. 2026

Note:Customers represent that they have all the necessary expertise to createand implement their own safeguards that anticipate dangerous failures, monitor failures and their consequences, lessen the likelihood of dangerous failures and take appropriate remedial actions.

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Product Introduction

Performance characteristics

- **High output power** : Output optical power is Above 4mW@10mA on CW with heatsink temperature 25°C.
- **The wavelength characteristics are stable** : the spectral line width is 20nm, and the temperature drift coefficient is 0.045nm / °C.
- **Other wavelengths, chip dimensions, and emitter patterns are available according to customer request.**

Application scenarios

- Laser indication
- Laser scanning
- Blood oxygen sensing
- Smoke detection

Electro-optical characteristics (25°C)

Parameters	Symbol	Min	Typical	Max	Units	Test Condition
Optical Output Power	P _{OP}	4	5	-	mW	10mA@25°C
Threshold Current	I _{th}	2.5	3.5	4.5	mA	25°C
Operating Current	I _{op}	-	10	-	mA	-
Series Resistance	R _s	-	80	-	Ω	9-11mA@25°C
Operating Voltage	V _{op}	-	2.8	3	v	10mA@25°C
Slope Efficiency	η _s		0.75	-	W/A	8-10mA@25°C
Wavelength	λ _{peak}	650	660	670	nm	
Wavelength coefficient	dλ/dT	-	0.045	-	nm/ °C	I _o =10mA

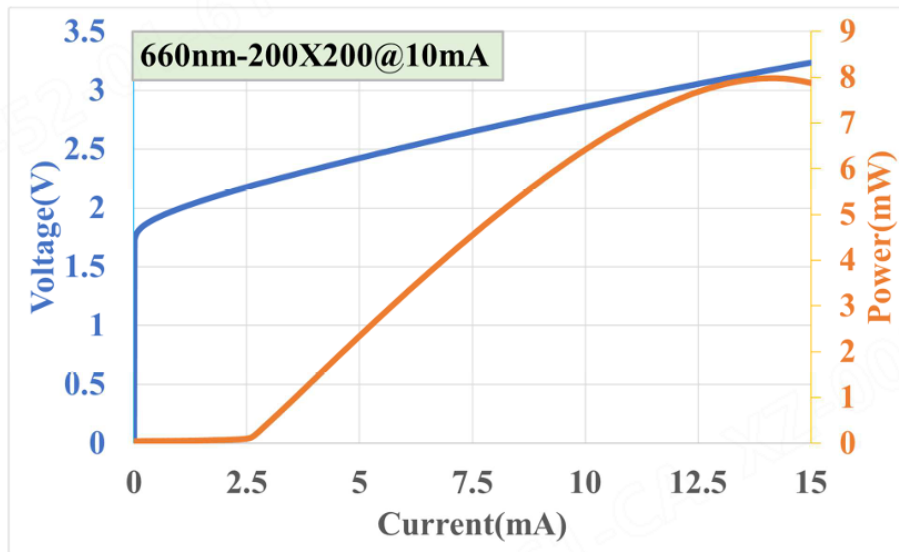
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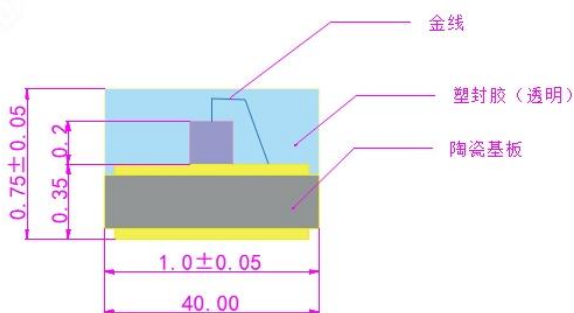
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Electro-optic conversion curve



Product Dimension(units:mm)



Parameter	Units	Value
Length	mm	1.0±0.05
Width	mm	0.5±0.05
Height	mm	0.75±0.05

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Absolute Maximum Ratings

Parameter	Symbol	Min.	Max.	Units
Operating temperature	Top	-20	85	°C
Operating humidity	Hop	0	85	%
Storage temperature	Ts	-40	110	°C
Storage humidity	Hs	0	85	%

Eye safety and disclaimer

Security recommendations

Depending on the usage of the device, the module may emit highly concentrated invisible infrared light that is harmful to the human eye. Products containing these modules may be required to follow the safety precautions specified in IEC 60850-1 and IEC62471.

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Note:

No responsibility is assumed for the use of these products. The products can emit Class I~IV radiation and must be operated with extreme care. Avoid directly viewing the laser beam or exposure to specular reflections. Proper eye wear must be worn at all times when operating. VCSEL Chip in the modules are electrostatic-sensitive device and proper ESD protection is required for handling



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