

1. Product Overview

The product with small volume and high emission power adopts metal packaging and Multi Epitaxial light-emitting layer stacking structure.

2. Product Features

The pulsed laser power is 25W, the emission wavelength is 905nm, and the luminous aperture is 75μm×10μm.

3. Application Scene

The products are mainly used in laser ranging telescope, automobile anti-collision system, infrared lighting system, lidar, monitoring, warning and other fields.

4. Limiting Operating Parameters

Parameters	Symbol	Limit Value		Unit
		Minimum	Maximum	
Peak power	P _{peak}	-	35	W
Forward current	I _F	-	13	A
Pulse width	t _p	-	200	ns
Duty cycle	d.c.	-	0.1	%
Reverse voltage	V _R	-	3	V
Operating temperature	T _{OP}	-40	+85	℃
Storage temperature	T _{stg}	-40	+100	℃
Welding temperature (10s, the lead out end of the pin shall be at least 2mm)	T _s	-	260	℃

5. Typical Operating Parameters(25℃)

Working conditions: pulse width is 200ns, repetition frequency is 5KHz, and peak current is 10A.

Parameters	Symbol	Limit Value			Unit
		Minimum	Typical value	Maximum	
Emission wavelength	λ_{peak}	895	905	915	nm
Spectral width	$\Delta\lambda$	-	7	-	nm
Peak power	P_{peak}	23	25	-	W
Threshold current	I_{th}	0.4	0.50	0.7	A
Luminous area	W_h	-	$75\mu\text{m} \times 10\mu\text{m}$	-	
Divergence angle	$\theta // \times \theta \perp$	-	11×27	-	°
Wavelength temperature coefficient	$\partial\lambda / \partial T$	-	0.28	-	nm/°C

6. Main Characteristic Curve

Fig. 1 Power - Current and Voltage - Current Relationship

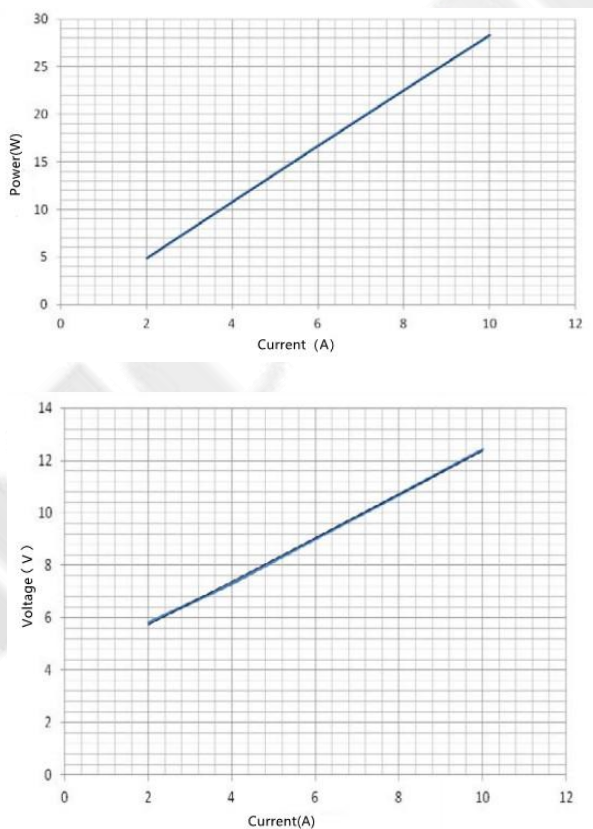


Fig. 5 Near Field Spot



Fig. 6 Outline Drawing and Pin Definition

