

905nm 75W High Power Pulsed Laser Diode

905nm Pulsed-mode LD, 75W Output Power, Plastic Package

WSPLD-905-075-1

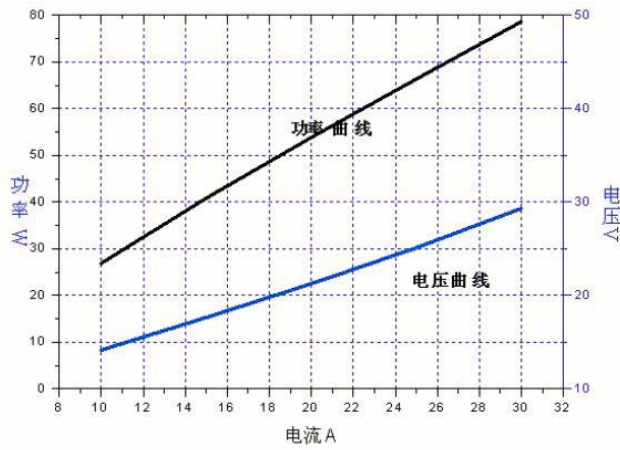
Wavespectrum Laser Group .

www.wavespectrum-laser.com

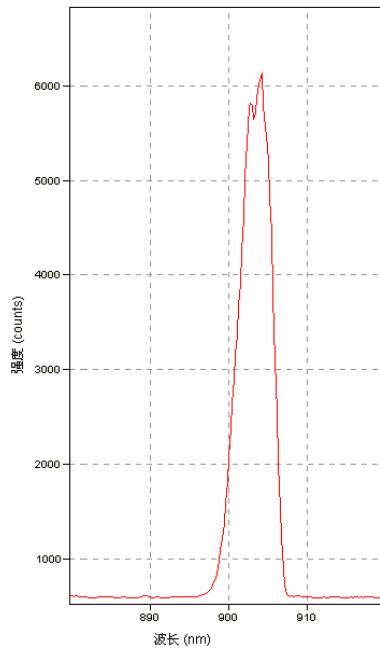
PARAMETER	SYMBOL	VALUE	UNIT	
Reverse Voltage	V_r	3.0	V	
Peak power	P_{peak}	90	W	
Peak forward current	I_F	40	A	
Pulse Width	t_p	200	ns	
Duty Ratio	d.c	%	0.1	
Operating Temperature	T_{op}	-40 ~ +85	°C	
Storage Temperature	T_{stg}	-40 ~ +100	°C	
Lead soldering temperature (10 sec.)	T_{is}	260	°C	
Features: <ul style="list-style-type: none"> ● 905nm pulsed-mode laser diode ● Low Cost Plastic Package ● Epitaxial layer stacking structure ● Luminous aperture: 200 μ m X10 μ m 				
Applications: <ul style="list-style-type: none"> ● Range finding ● Infrared illumination ● Laser radar ● Surveying equipment 				
Specifications		WSPLD-905-075-1		
		Min	Type	Max
Center Wavelength@25°C		895nm	905nm	915nm
Spectral Width (FWHM)		----	7nm	----
Peak Power		65W	75W	85W
Emitter quantity		3		
Emitter Size		----	200um*10um	----
Beam Divergence (FWHM)		----	11° _⊥ x 25° _{//}	----
Threshold Current (Typ.)		0.5A	0.75A	1.0A
Temperature Coefficient of Wavelength		----	0.28nm / °C	----



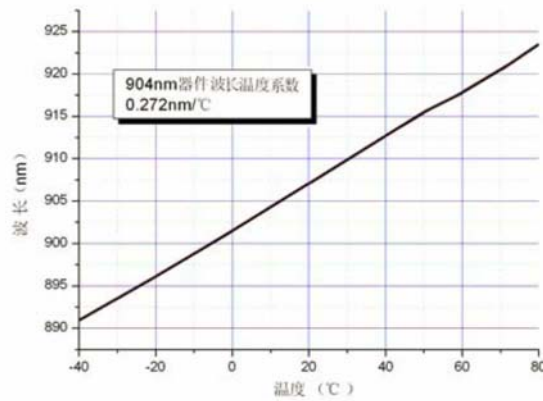
1: Power –Current, Voltage-Current Curve



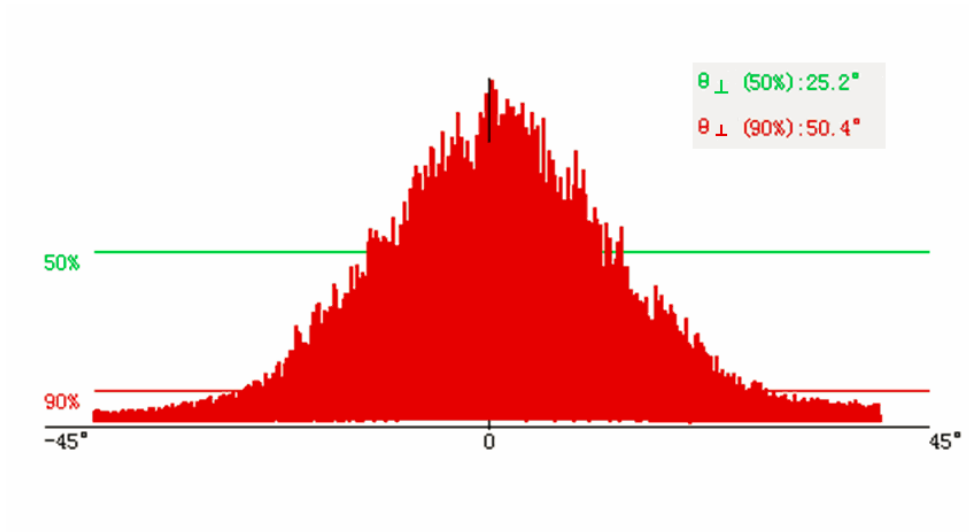
2: Spectrogram



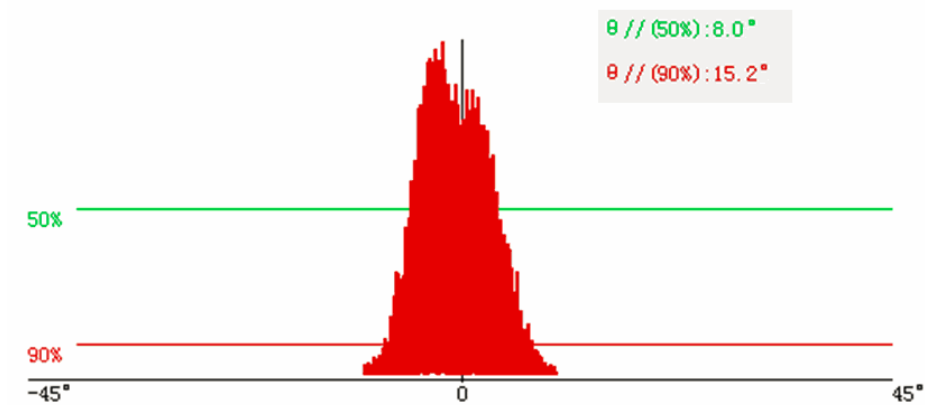
3: Wavelength-Temperature Curve



4: Perpendicular divergence Angle



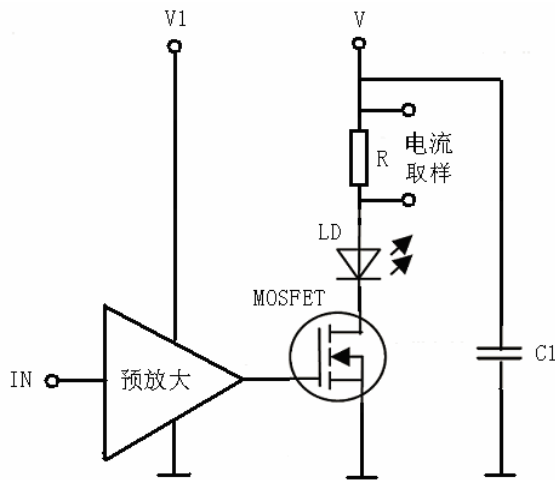
Level divergence Angle



5: Near-field spot



6: Detection circuit



Test condition:

F=5kHz Tw=200ns V1=12V IP=25A

Recommend Circuit and parameter:

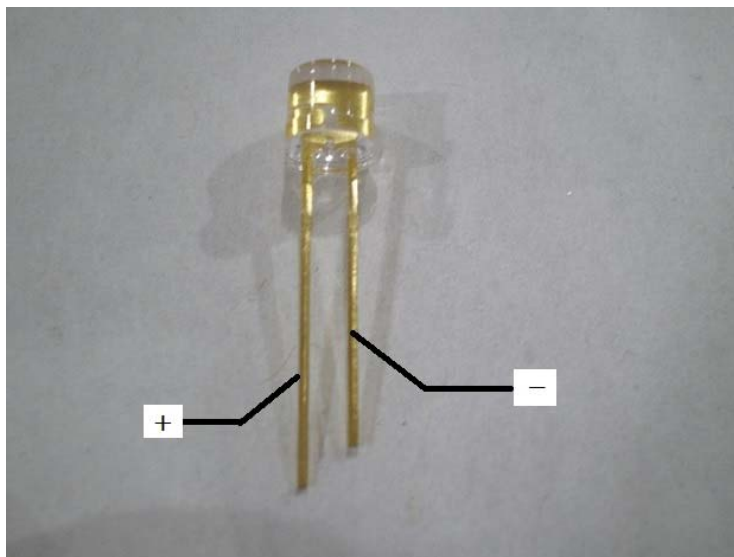
Sample Resistor: 0.1 Ω

MOSFET: IRF 7478

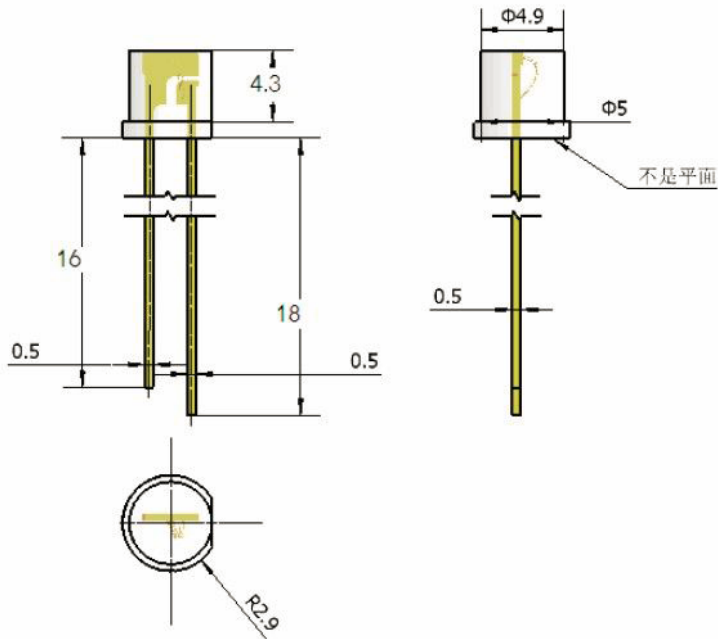
Preamp: MAXIM 5048B

Capacitor C1: 1000 μ F

7: PIN definition



8: Outline drawing



Electrically shorten LD module and store in non-extreme conditions.
 Suggest using the constant current power supply.



Website: www.wavespectrum-laser.com
 Email: info@wavespectrum-laser.com



Wavespectrum Laser, Inc.
www.wavespectrum-laser.com
wavespectrumlaser@gmail.com

