

# 产品. 规格书

## PRODUCT SPECIFICATION

产品名称

Product Name

450激光器

产品编号

Product Number

45MZ-162

规格

Parameter

21.4\*35mm

受控文件

东莞市蓝宇激光有限公司

Dongguan Blueuniverse Laser Co., Ltd

DESCRIPTION. :

(规格书)

SPECIFICATION

THESE SPECIFICATION ARE THE PROPERTY OF DongGuan  
Blueuniverse Laser Co., Ltd  
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OF APPARATUSES OR DEVICES WITHOUT PERMISSION.

Model No. :

JLM45350ZA-N1C9

| 日期 | 制定 | 品管 | 审核 | 核准 | Document No. : | REV |
|----|----|----|----|----|----------------|-----|
|----|----|----|----|----|----------------|-----|

LY-WI-RD-F0488

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2018.9.13 蓝宇激光有限公司 规格书 450激光器

# 光电参数

## PHOTOELECTRIC PARAMETER

TC=25°C

| 项目<br>Items                               | 符号<br>Symbols | 值<br>Values | 单位<br>Unit |
|---|---------------|-------------|------------|
| 激光二极管反向电压:<br>Laser Diode Reverse Voltage | Vr1 (LD)      | 0           | V          |
| 工作温度:<br>Working temperature              | Topr          | 0°C至70°C    | °C         |
| 储存温度:<br>Storage temperature              | Tstg          | - 40°C至85°C | °C         |

TC=25°C

| 项目<br>Items                | 符号<br>Symbols | 最小<br>Min                       | 标准<br>Typ | 最大<br>Max                      | 单位<br>Unit | 条件<br>Condition   |
|----------------------------|---------------|---------------------------------|-----------|--------------------------------|------------|-------------------|
| 光输出功率:<br>Optical Output   | Po            | /                               | 3.5       | /                              | W          |                   |
| 阈值电流:<br>Threshold Current | Ith           | 280                             | /         | 480                            | mA         | 3.5W              |
| 工作电流:<br>Working current   | Iop           | /                               | 3000      | 3200                           | mA         | 3.5W              |
| 工作电压:<br>Operating Voltage | Vop           | /                               | 4.6       | 4.8                            | V          | 3.5W              |
| 激光波长:<br>Lasing Wavelength | $\lambda p$   | 448                             | 455       | 462                            | nm         | 3.5W              |
| 导线长度:<br>Wire length       | Wl            |                                 | 230       |                                | mm         | 备注: 模组聚焦后有25%的光损耗 |
| 工作时间:<br>Service Life      | MTTF          |                                 | 8000      |                                | Hrs        |                   |
| 光点大小:<br>Lightspot Size    | $\phi$        | 可调焦距<br>Adjustable focal length |           | 外壳极性:<br>The polarity of shell |            | no polarity       |

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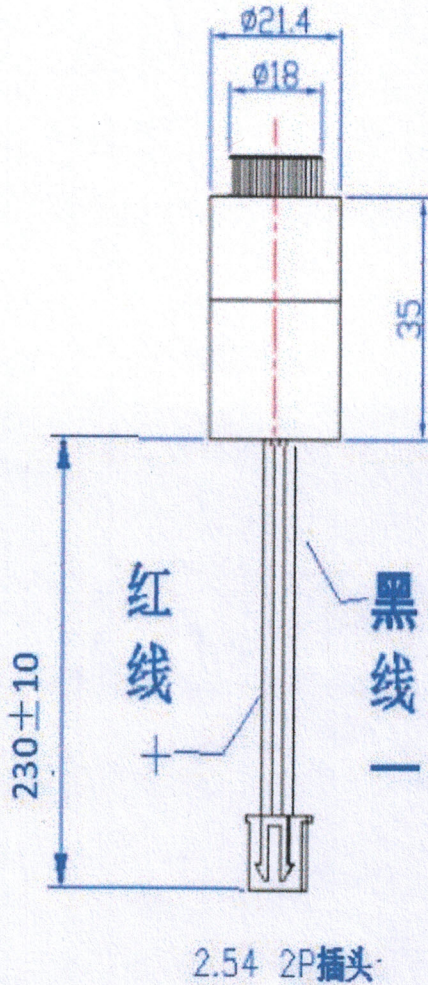
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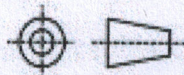
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# 外形尺寸 DIMENSIONS



| UNSPECIFIED DIMENSINO TOL(GB/T1804-92)            |            |            |
|---|------------|------------|
| DIM \ TOL   | COARSENESS | COARSENESS |
| 0.5~3   | $\pm 0.02$ | $\pm 0.04$ |
| 3~6   | $\pm 0.05$ | $\pm 0.1$  |
| 6~30  | $\pm 0.1$  | $\pm 0.2$  |
| 30~120  | $\pm 0.2$  | $\pm 0.8$  |
| 120~400   | $\pm 0.5$  | $\pm 1.2$  |
| UNSPECIFIED ANGLE TOL(GB11359-89-M) $\pm 1^\circ$ |            |            |
| Form No: FR-04-0013 Revision: REV0 Date:2016-4-11 |            |            |

UNITS: MM



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# 注意事项

## CAUTIONS

|  |   |
|--|---|
| <p>1. 激光模组发射的激光有可能对眼睛造成伤害。激光模组工作时，严禁直接注视其端面，并佩戴防护眼镜。</p>             | <p>1. The laser light emitted by laser module is likely to injure persons' eye, so do not directly gaze its end surface and wear appropriate safety glasses to prevent laser light when it is working.</p>                                    |
| <p>2. 器件需要合适的驱动电源，激光模组和电源连接时，电源输出电压应为零；电流调节时应缓慢增加或减少，以免冲击电流损坏器件。</p> | <p>2. Laser module need appropriate laser driver (PCB). When laser module connect with power supply, please set the output voltage to zero. The adjustment of current should be slowly increase or decrease to avoid damaging the device.</p> |
| <p>3. 器件应当存放或工作于干燥环境，防尘等级达到百万级，以免镜片落入灰尘影响光斑。</p>                     | <p>3. Keep the device working or storing in dry environment. Anti-dust grade is over one million, in order to prevent dust inside the lens to</p>   |
| <p>4. 在较高温度下工作，会增大阈值电流，降低转换效率，加速器件的老化。</p>                           | <p>4. Working at high temperatures will increase the threshold current, reduce conversion efficiency and speed up the aging of the device.</p>  |
| <p>5. 输出功率高于指定参数工作，会加速器件老化。</p>                                      | <p>5. When output power is higher than it's specific parameter of operation, it will accelerate the aging of the device.</p>  |
| <p>6. 连续工作中激光管温度达到70℃。要做好散热。</p>                                     | <p>6. When the operation temperature of laser diode is over 70degree, please do well heat dissipation of it.</p>  |
| <p>7. 本产品属于静电敏感器件，在人体有良好接地的情况下才可拿取，防静电可采用防静电手镯的方法。</p>               | <p>7. This laser module is electrostatic sensitive device. Please make sure ground yourself or wear an antistatic wrist strap before you take it</p>  |



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<http://www.bu-laser.com>

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