


445nm~450nm 4W~4.5W TO5 Laser Diode with Square Beam | TO5 9mm Package |Blue Laser Diode

450nm LD| 4.5W Output Power | 9mm TO5 Package | With FAC Lens

WSLD-445-4500m-2-FAC

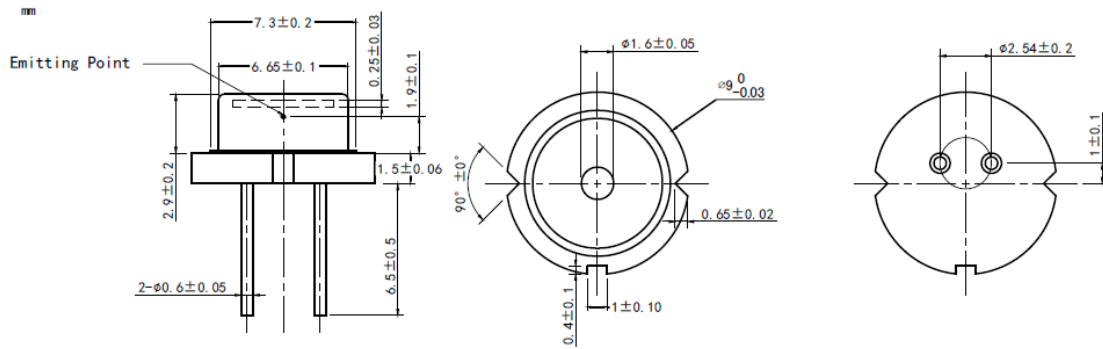
Wavespectrum Laser Group.

www.wavespectrum-laser.com

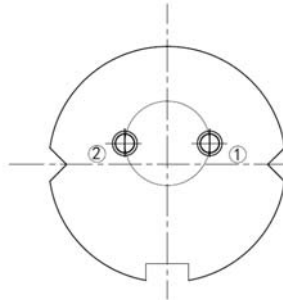
| 445nm Laser Diode                                                                                                                               |                        | 4.5W/TO5                                                                            |                                   | en.wavespectrum-laser.com.cn      |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|--|
| PARAMETER                                                                                                                                       | SYMBOL                 | VALUE                                                                               |                                   | UNIT                              |  |
| Reverse Voltage                                                                                                                                 | $V_r$                  | 2.0                                                                                 |                                   | V                                 |  |
| Operating Temperature                                                                                                                           | $T_{op}$               | 0~+60                                                                               |                                   | °C                                |  |
| Storage Temperature                                                                                                                             | $T_{stg}$              | -40~+85                                                                             |                                   | °C                                |  |
| Lead soldering temperature (10 sec.)                                                                                                            | $T_{is}$               | 260                                                                                 |                                   | °C                                |  |
| <b>Features:</b> <ul style="list-style-type: none"> <li>445nm</li> <li>4.5W Output Power</li> <li>TO5 Package</li> <li>With FAC Lens</li> </ul> |                        |  |                                   |                                   |  |
| <b>Applications:</b> <ul style="list-style-type: none"> <li>Medical Laser Treatment</li> <li>Laser Show</li> <li>Others</li> </ul>              |                        |                                                                                     |                                   |                                   |  |
| <b>Specifications</b>                                                                                                                           |                        | <b>WSLD-445-4500m-2-FAC</b>                                                         |                                   |                                   |  |
|                                                                                                                                                 |                        | Min                                                                                 | Type                              | Max                               |  |
| Center Wavelength@25°C                                                                                                                          |                        | ±5nm                                                                                | 450nm                             | ±15nm                             |  |
| Spectral Width (FWHM)                                                                                                                           |                        | 3.0nm                                                                               |                                   |                                   |  |
| Output Power                                                                                                                                    |                        | 4.0W                                                                                | 4.5W                              | ----                              |  |
| Recommended Operating Temperature                                                                                                               |                        | 25°C                                                                                |                                   |                                   |  |
| Beam                                                                                                                                            | Beam Divergence (FWHM) | ----                                                                                | $10^\circ \pm \times 10^\circ //$ | $13^\circ \pm \times 13^\circ //$ |  |
|                                                                                                                                                 | Beam Shape             | Square Beam (1:1)                                                                   |                                   |                                   |  |
| Linear Shape Beam( $2^\circ \pm \times 10^\circ //$ ,1:5)                                                                                       |                        | Optional                                                                            |                                   |                                   |  |
| Slope Efficiency                                                                                                                                |                        | ----                                                                                | 1.6W/A                            | ----                              |  |
| Threshold Current (Typ.)                                                                                                                        |                        | ----                                                                                | 0.3A                              | 0.6A                              |  |
| Operating Current (Typ.)                                                                                                                        |                        | ----                                                                                | 3.0A                              | 3.3A                              |  |
| Operating Voltage                                                                                                                               |                        | ----                                                                                | 4.5V                              | 5.5V                              |  |
| Package Style                                                                                                                                   |                        | TO5 (9mm)                                                                           |                                   |                                   |  |



### Package View



### PIN Bottom View:



|   |       |
|---|-------|
| 1 | LD(+) |
| 3 | LD(-) |

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

