D3.0mm NA0.22 Collimating Lens

Key Parameters
Diameter=3.0mm  
NA=0.22  
EFL=6.0mm / BL=5.2mm  

Application  
Laser Sight Collimation/ Small Laser Pointer / Portable Laser Tag  
Industry / Biochemical / Laser Sensing  

Feature
- Aspherical Molding Glass Lens  
  For high temperature, low deformation, good reliability and abrasive resistance  
- NA0.22 for divergent angle to 24.5°  
- Small dimension size and suitable working distance for general divergent angle of laser diode  

Introduction
Aspherical lenses are lenses with surfaces which are not a portion of sphere. Aspherical lenses are more superior in many applications than conventional lenses. One well designed aspherical lens can have the same or better performance than multiple spherical lenses. Therefore it reduces the number of lenses in one optical system and makes system lighter and more compact. Nowadays, by advanced high technology of production, aspherical lens has been successfully made in large quantity and meanwhile the cost is competitive against conventional high grade optical system. We provide various kinds of aspherical lenses. This document shows the specification of lens used in laser collimating. Besides the off-the-shelf lenses, customized lenses are also feasible based on customer’s requirements.
**Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>D-ZK3</td>
</tr>
<tr>
<td>Diameter (mm)</td>
<td>3.0 ± 0/-0.03</td>
</tr>
<tr>
<td>Design Wavelength (nm)</td>
<td>635</td>
</tr>
<tr>
<td>Clear Aperture (mm)</td>
<td>2.6</td>
</tr>
<tr>
<td>EFL (mm)</td>
<td>6.0 ± 1%</td>
</tr>
<tr>
<td>BFL (mm)</td>
<td>5.2 ± 1%</td>
</tr>
<tr>
<td>N.A.</td>
<td>0.22</td>
</tr>
<tr>
<td>Center Thickness (mm)</td>
<td>1.5 ± 0.03</td>
</tr>
<tr>
<td>AR Coating (Optional)</td>
<td>400-600nm, &lt;1%</td>
</tr>
<tr>
<td></td>
<td>700-1050nm</td>
</tr>
<tr>
<td>Decentering</td>
<td>&lt; 3 mins</td>
</tr>
<tr>
<td>Wavefront Aberration RMS</td>
<td>&lt; 0.05 λ</td>
</tr>
<tr>
<td>Surface Quality</td>
<td>40/20</td>
</tr>
</tbody>
</table>

**Package**

![Diagram of package](image)