

Collimator Lens ($\Phi 8.0$)

Key Parameters

EFL=11.2mm/N.A.=0.3

Introduction

Aspherical lenses are lenses with surfaces which are not a portion of a 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. Egismos provides 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 requirement.

Specifications	
Material	BK7
Diameter(mm)	8.0+0/-0.03
Design Wavelength(nm)	635
Clear Aperture(mm)	6.5
EFL(mm)	11.2±1%
BFL(mm)	9.7±1%
N.A.	0.3
Center Thickness(mm)	2.66±0.03
AR Coating(Optional)	400-700nm
R<1%	600-1050nm
Decentering	< 3 mins
Surface Quality	40/20

The technical drawing shows a cross-section of the lens. It has a total diameter of 8.00 mm. The front surface is aspherical with radius R1. The back surface is spherical with radius R2. The center thickness is 2.66 mm. There are two clear apertures: an inner one of 7.00 mm diameter and an outer one of 6.50 mm diameter.

