

Excellence in Digital Imaging Optics

Compact DSC Lens For 1.3M Pixel CMOS Imager

Description

DSL813 lens is a multi-element glass lens optimized for 1.3M CMOS imager with 1/(2.7") format. It is especially suited for building low-cost, compact digital cameras because of the low-profile property of the lens design.

Key Features

- Low profile: optical path length 11.8 mm from lens front physical surface to the image plane
- All glass elements: compatible with outdoor environment
- Dual-mode aperture F/3.2: long depth of focus, optimized for focus operation
- High image quality
- Low-cost

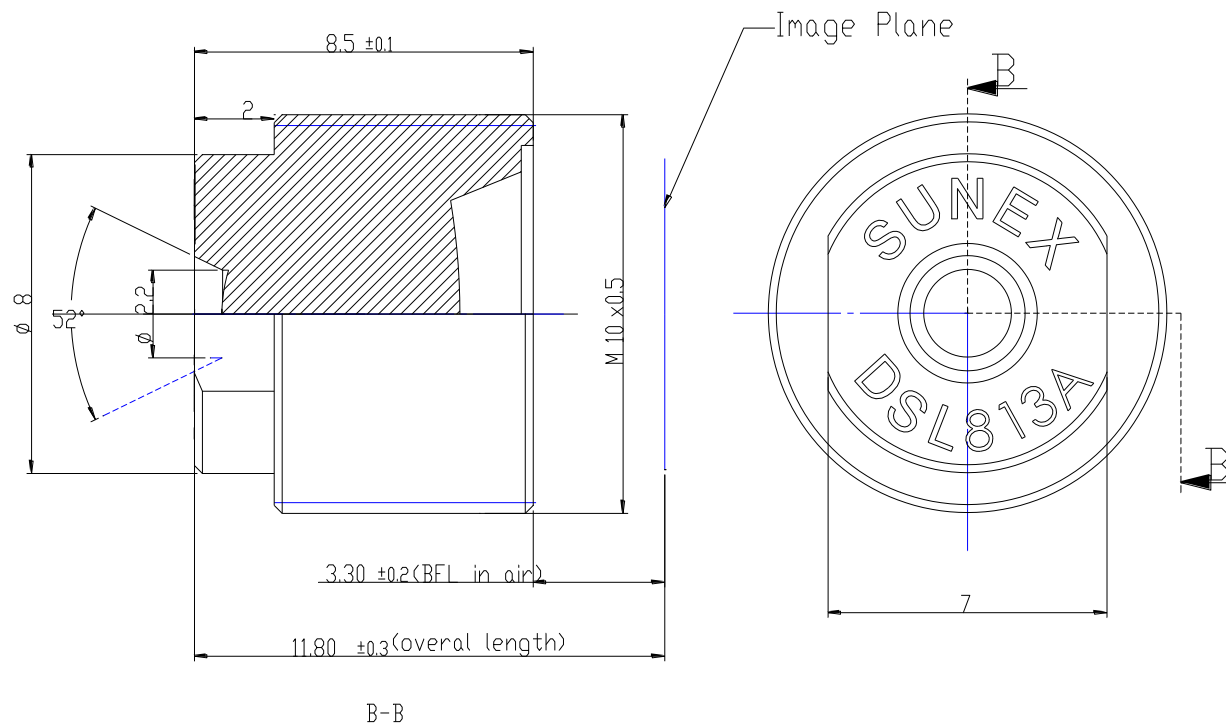
Applications

- Compact digital still cameras.
- Long barrel length version DSL813A
- Short barrel length version DSL813B

Optical specifications

| PN | DSL813 |
|------------------------------------|---|
| Description | Low-profile DSC lens |
| Imager Format | 1/2.7" |
| Imager Resolution | 1280x1024 |
| Focal length (mm) | 7.0 |
| F/# | 3.2 |
| Max. Image Circle(mm) | 7.0 (used in all following calculation) |
| Diagonal Field of View (deg) | 52 |
| 35mm Equivalent Focal Length (mm) | 45 |
| Modulation Transfer Function (MTF) | See MTF data for details |
| Resolution | See MTF data for details |
| Distortion | -1.7 (at 6.8mm circle) |
| Corner chief ray angle (deg) | 13.5 (at 6.8mm circle) |
| Relative Illumination | 65% (at 6.8mm circle) |
| Total optical path length (mm) | 11.8 |
| Mechanical | See below |
| Filter Option | IR-cut coating included |
| Lens mount option | CMT802 |

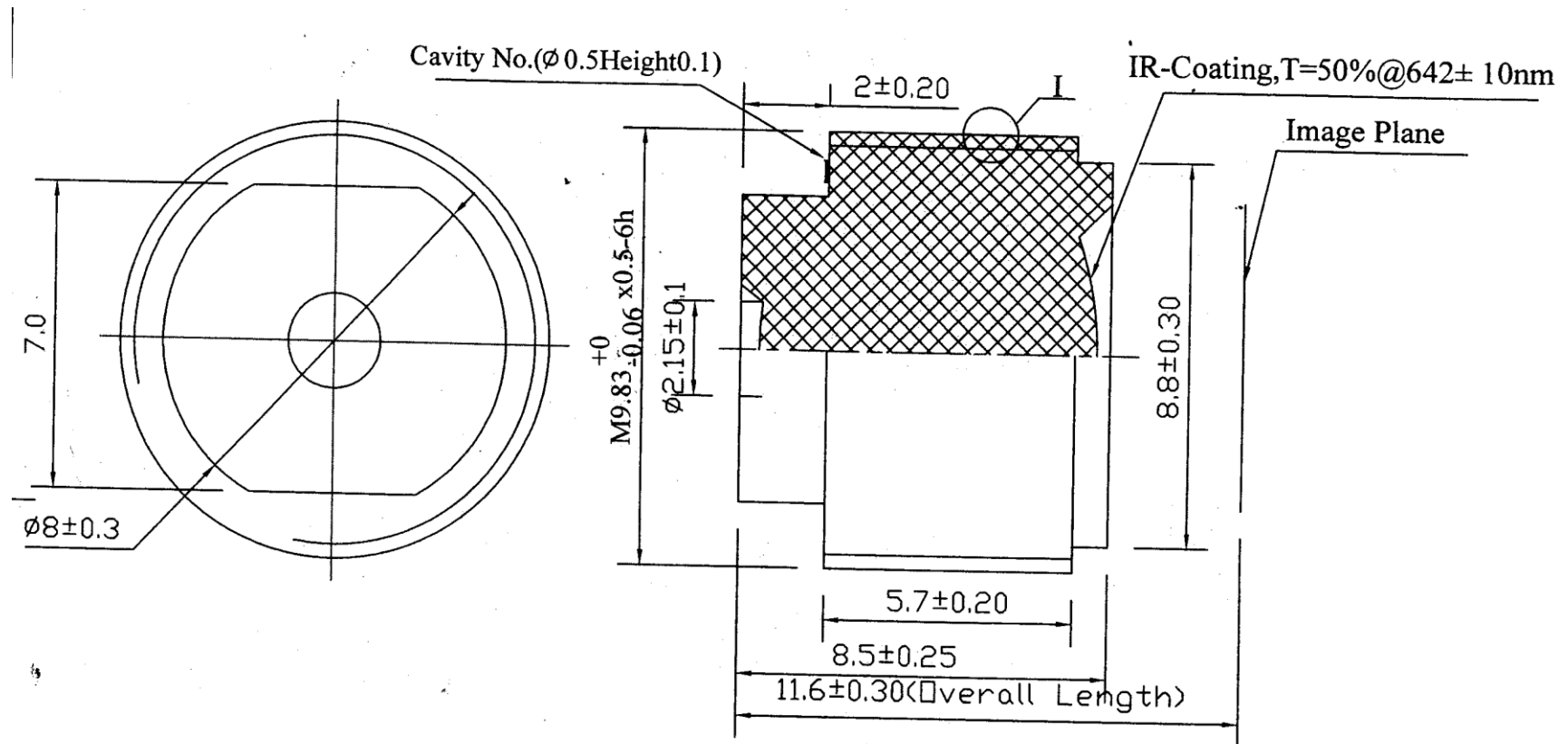
DSL813A Mechanical features:



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DSL813E-650-F3.2



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