

## Micro Lens (Ultra small lens)

Under the condition of high refractive index, some components can achieve short focal length. Therefore, the micro lens becomes an ideal choice in the field of high precision applications.

Because of the ultra-small size of this kind of lens (outer diameter 0.5mm-5mm, length: 1mm-20mm), micro lens or ultra-small lens often requires special processing technology, unique production know-how and special optical fixture, etc.

Photonchina provides various sizes of micro lens with an array of applications including active devices, wavelength division multiplexer ( WDM) and fiber lasers (see C-lens, G-lens) in fiber communications, endoscopy for medical and industrial use, capsule endoscope, etc. Its new application fields are still expanding.

A variety of optical glass or other materials, such as N-SF11, H-LAF76, Fused Silica and so on are available for customer's design. H-LaF53, for instance, has often been used in endoscope lens or capsule lens production. The outer diameter of micro lens covers 0.5mm to 5.0mm with any radius of curvature that can be made. We have a wide range of lenses in shape: convex, concave, biconvex, meniscus etc.

Photonchina can provide unique rod-shaped glued lens by combining special gluing technics and edging skill. This rod lens has excellent eccentricity and clear aperture index. From design, manufacturing to optical coating, from endoscope lens, capsule lens to special-required rod lens, engineers in Photonchina implement strict production process to ensure stable quality, good yield, competitive price as well as responsive lead time.

Through years of accumulated processing know-how technologies and manufacturing capacity, high standard thin film coating performance and strict testing requirements, Photonchina provides customers with one of the world's smallest micro lens series products, which have been widely used in various medical devices (endoscope lens, for example), precision surveying and optical communications instruments.

Being a long term partner of customers worldwide in micro lens or ultra small lens products, Photonchina are proud of achievements made and will keep striving for a higher level of satisfaction of customers.

## Photonchina micro lens specifications

Material : N-SF11, H-LaF53, H-LaF76, Fused Silicon etc.	Radius of Curvature (mm) : R0.25~R $\infty$
Diameter (mm) : $\Phi$ 0.5 ~ $\Phi$ 5	Tolerance (mm) : $\pm$ 0.005 ~ $\pm$ 0.05
Length (mm) : L1.0 ~L20	Tolerance (mm) : $\pm$ 0.02~ $\pm$ 0.06
Thickness tolerance (mm) : $\pm$ 0.01 ~ $\pm$ 0.1	Surface Quality: 10/5~80/50
Flaness: $\lambda/20\sim\lambda/4$	Off centering: 1'~10'
Optical coating : Upon request	

