

Single mode fiber achromatic collimator

1310nm (beam waist spot diameter 2mm

FCAPC)



- **Product Description**

Composed of a large numerical aperture lens system, it can use multimode optical fibers with larger numerical apertures. The beam emitted from the multimode fiber can be shaped, or the spatial plane beam can be coupled into the multimode fiber to achieve good collimation and spot shape over long distances.

● Product features

Achromatic design optimization; multimode fiber compatibility; enhanced thermal stability design; precise waist spot control; high power and reliability

● Part Number

MP-CLM-1310-2-0.053-SA

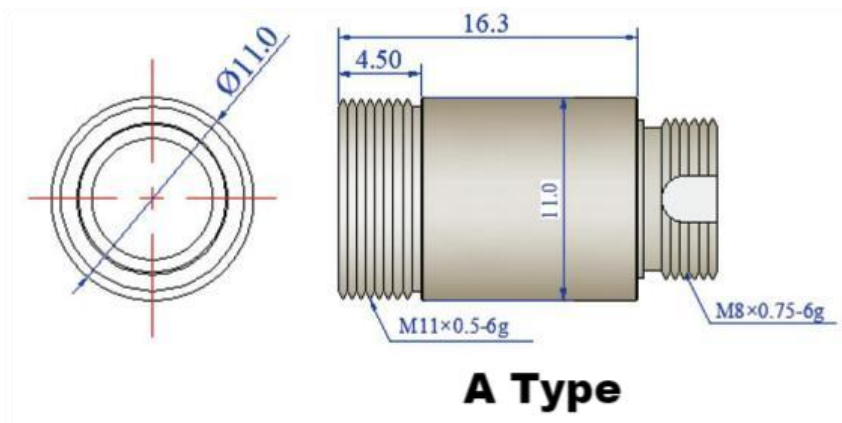
● Application area

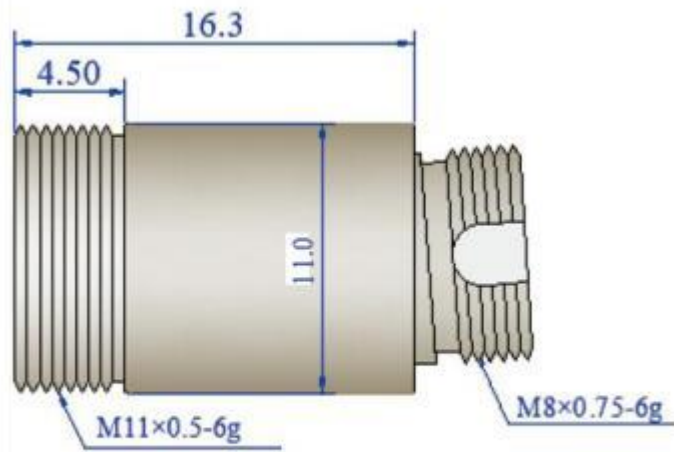
Optical Network Testing | Industrial Sensing | Medical Endoscopy | Security Surveillance | Fiber Optic Component Inspection

● Core parameters

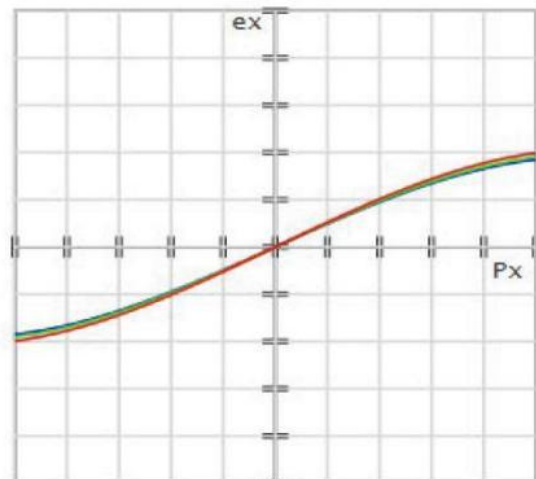
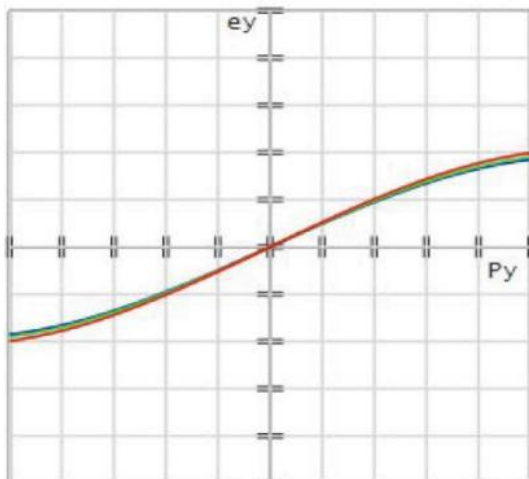
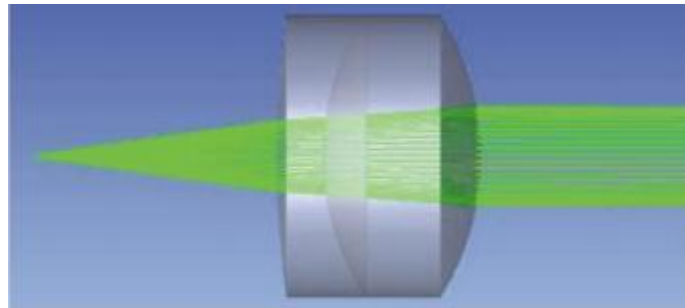
| Center wavelength | Operating Bandwidth | Waist Beam | Connectors |
|-------------------|---------------------|------------|------------|
| 1310nm | 1050~ 1700nm | 2mm | FC/APC |

● General Parameters





B Type



phasic variation curve with wavelength



| Wavelength | Bandwidth | Waist Beam | Divergence Angle | EFL | NA | Package Dia. | Fiber Type | Max. Power | Transmittance |
|------------|-----------|------------|------------------|----------|------|--------------|------------|----------------------------------|---------------|
| 405nm | ± 30nm | 0.97 mm | 0.062+ 0.01° | 4.06 mm | 0.61 | Φ 11mm | 405 HP | 2W/mm ² @Beam Size | >95% |
| | ± 30nm | 2.0 mm | 0.03+0 .01° | 10.05 mm | 0.37 | Φ 11mm | | | |
| | ± 30nm | 3.7 mm | 0.021+ 0.01° | 15.96 mm | 0.25 | Φ 11mm | | | |
| | ± 30nm | 3.95 mm | 0.015+ 0.01° | 19.95 mm | 0.2 | Φ 11mm | | | |
| 450nm | ± 30nm | 0.96 mm | 0.06+0 .01° | 4.10 mm | 0.6 | Φ 11mm | 460 | | |
| | ± 30nm | 2.0 mm | 0.028+ 0.01° | 10.07 mm | 0.37 | Φ 11mm | HP | | |



| | | | | | | | | |
|-------|-----------|------------|-----------------|-------------|----------|---------------|-----------|--|
| | ± 30nm | 3.6 mm | 0.020+ 0.01° | 15.98 mm | 0. 25 | Φ 11m m | | |
| | ± 30nm | 3.95 mm | 0.014+ 0.01° | 19.96 mm | 0. 2 | Φ 11m m | | |
| 520nm | ± 30nm | 0.92 mm | 0.059+ 0.01° | 4.15 mm | 0. 6 | Φ 11m m | | |
| | ± 30nm | 2.0 mm | 0.025+ 0.01° | 10.09 mm | 0. 37 | Φ 11m m | | |
| | ± 30nm | 3.2 mm | 0.019+ 0.01° | 15.98 mm | 0. 25 | Φ 11m m | | |
| | ± 30nm | 3.95 mm | 0.014+ 0.01° | 19.97 mm | 0. 2 | Φ 11m m | | |
| 635nm | ± 30nm | 0.87 mm | 0.056+ 0.01° | 4.20 mm | 0. 58 | Φ 11m m | 630 HP | |
| | ± | 2.0 | 0.024+ | 10.13 | 0. | Φ | | |

| | | | | | | | | | |
|-------|------|------|--------|-------|----|-----|-----|--|--|
| | 30nm | mm | 0.01° | mm | 37 | 11m | | | |
| | ± | 3.12 | 0.019+ | 16.01 | 0. | Φ | | | |
| | 30nm | mm | 0.01° | mm | 25 | 11m | | | |
| | ± | 3.95 | 0.014+ | 20m | 0. | Φ | | | |
| | 30nm | mm | 0.01° | m | 2 | 11m | | | |
| | ± | 1.95 | 0.031+ | 10.04 | 0. | Φ | | | |
| | 30nm | mm | 0.01° | mm | 37 | 11m | | | |
| 780nm | ± | 3.49 | 0.020+ | 16.0 | 0. | Φ | | | |
| | 30nm | mm | 0.01° | mm | 24 | 11m | | | |
| | ± | 4.4 | 0.015+ | 20.03 | 0. | Φ | 780 | | |
| | 30nm | mm | 0.01° | mm | 2 | 11m | HP | | |
| | ± | 2.0 | 0.030+ | 10.05 | 0. | Φ | | | |
| 850nm | 30nm | mm | 0.01° | mm | 37 | 11m | | | |
| | ± | 3.47 | 0.020+ | 16.01 | 0. | Φ | | | |
| | 30nm | mm | 0.01° | mm | 24 | 11m | | | |



| | | | | | | | | | |
|--|------|------|--------|-------|----|-----|--|--|--|
| | | | | | | m | | | |
| | ± | 3.95 | 0.016+ | 20.03 | 0. | Φ | | | |
| | 30nm | mm | 0.01° | mm | 2 | 11m | | | |
| | | | | | | m | | | |

| Wavelength | Bandwidth | Waist Beam | Divergence Angle | EFL | NA | Package Dia. | Fiber Type | Max. Power | Transmittance |
|------------|-------------|------------|------------------|-------------|------|--------------|------------|-------------------------------------|---------------|
| 980nm | 600~1050nm | 2.0mm | 0.035+ 0.01° | 10.0 7mm | 0.37 | Φ 11mm | 980HP | 2W/mm ² @Beam Size | >95% |
| | 600~1050nm | 3.39mm | 0.024+ 0.01° | 16.0 3mm | 0.24 | Φ 11mm | | | |
| | 600~1050nm | 4.23mm | 0.018+ 0.01° | 20.0 5mm | 0.2 | Φ 11mm | | | |
| 1064nm | 1050~1700nm | 2.0mm | 0.038+ 0.01° | 10.0 3mm | 0.37 | Φ 11mm | HI1060 | | |



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|------------|-----------------|------------|-----------------|-------------|----------|---------------|------|--|--|
| | 1050~1 700nm | 3.51 mm | 0.032+ 0.01° | 15.9 7mm | 0. 24 | Φ 11m m | | | |
| | 1050~1 700nm | 3.9 mm | 0.026+ 0.01° | 19.9 7mm | 0. 2 | Φ 11m m | | | |
| | 1050~1 700nm | 2.0 mm | 0.053+ 0.01° | 10.0 7mm | 0. 37 | Φ 11m m | | | |
| 1310n m | 1050~1 700nm | 2.91 mm | 0.036+ 0.01° | 16.0 1mm | 0. 24 | Φ 11m m | | | |
| | 1050~1 700nm | 3.62 mm | 0.028+ 0.01° | 20.0 mm | 0. 2 | Φ 11m m | SMF | | |
| | 1050~1 700nm | 2.0 mm | 0.06+0 .01° | 10.1 1mm | 0. 37 | Φ 11m m | | | |
| 1550n m | 1050~1 700nm | 3.14 mm | 0.039+ 0.01° | 16.0 8mm | 0. 24 | Φ 11m m | | | |
| | 1050~1 | 3.55 | 0.031+ | 20.0 | 0. | Φ | | | |
| | | | | | | | -28E | | |



| | | | | | | | | | |
|--------|--------|------|--------|------|----|-----|-----|--|--|
| | 700nm | mm | 0.01° | 7mm | 2 | 11m | | | |
| | | | | | | m | | | |
| 1654nm | 1050~1 | 2.0 | 0.06+0 | 10.1 | 0. | Φ | | | |
| | | | | | | 11m | | | |
| | 700nm | mm | .01° | 4mm | 37 | m | | | |
| | | | | | | | | | |
| | 1050~1 | 3.2 | 0.036+ | 16.1 | 0. | Φ | | | |
| | | | | | | | 11m | | |
| | 700nm | mm | 0.01° | 5mm | 24 | m | | | |
| | | | | | | | | | |
| | 1050~1 | 3.65 | 0.029+ | 20.1 | 0. | Φ | | | |
| | | | | | | 11m | | | |
| | 700nm | mm | 0.01° | 2mm | 2 | m | | | |
| | | | | | | | | | |

3D modeling drawing preview

