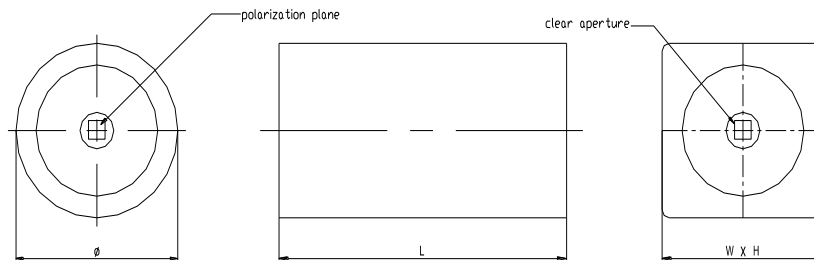


High Power Free Space Isolator 1040nm

The 1040 nm High Power Free Space Isolator is a magneto-optic faraday optical isolator allows light to be transmitted only in the forward direction while prevent back reflection. The free space isolators are commonly used to protect fiber lasers against back-reflected light. OF-LINK offers free space isolators with average handling power up to 50W (peak power could be up to 5MW upon request), clear aperture up to 5mm, and different operating wavelengths available.



Features

- High Isolation
- Large Clear Aperture
- High Transmission
- High Power Handling

Applications

- Fiber Laser
- Lab & Research

Performance Specification

| Parameter | Value | | Unit |
|--|---|---------------------------|------|
| | Single Stage | Dual Stage | |
| Stage | Single Stage | Dual Stage | nm |
| Center Wavelength (λ_c) | 1040 or customized | | nm |
| Bandwidth | ± 5 | ± 15 | nm |
| Typ. Isolation at 23°C, λ_c | 36 | 55 | dB |
| Min. Isolation at 23°C, λ_c | 25 | 40 | dB |
| Max. Insertion Loss at 23°C, λ_c | 0.35 | 0.6 | dB |
| Clear Aperture (CA) | 3.0, 3.6, 4.0, 5.0 (or Customized) | | mm |
| Tilt Angle of Input Light | 0 \pm 2 | | deg |
| Min. Return Loss | 55 | | dB |
| Polarization | Linear | | |
| Max. Optical Power (Continuous Wave) | 1, 3, 5, 10, 15, 20, 30, 50 | | W |
| Max. Tensile Load | 100 (higher Power available upon request) | | kW |
| Operating Temperature | 0 to +50 | | °C |
| Storage Temperature | -20 to +75 | | °C |
| Package Dimension for 3mm CA | Φ35XL70, or W35XH35XL70 | Φ35XL158, or W35XH35XL158 | mm |
| Package Dimension for ≥ 3.6 mm CA | Φ45XL80, or W45XH45XL80 | Φ45XL168, or W45XH45XL168 | mm |

Note

* For other clear aperture or handling power, pls discuss with OF-LINK.

Ordering Information

HPFSI-AAAA-B-CC-D-EE

| AAAA | B | CC | D | EE |
|----------------|------------------|----------------|-------------------|--------------|
| Wavelength | Stage | Clear Aperture | Package Type | Power |
| 1030 - 1030nm | S - Single Stage | 20 - 2.0mm | C - Circle Type | 01 - 1W |
| 1040 - 1040nm | D - Dual Stage | 30 - 3.0mm | Q - Quadrate Type | 03 - 3W |
| 1050 - 1050nm | | 36 - 3.6mm | | 05 - 5W |
| 1053 - 1053nm | | 40 - 4.0mm | | 10 - 10W |
| 1064 - 1064nm | | 50 - 5.0mm | | 15 - 15W |
| 1080 - 1080nm | | SS - Specify | | 20 - 20W |
| SSSS - Specify | | | | 30 - 30W |
| | | | | 50 - 50W |
| | | | | SS - Specify |