

1850nm High Power Isolator (HPIS / HPMIS)

Features

Wide Operating Wavelength
 High Isolation & High PER
 Telcordia GR-1221 Compliant
 Available for Both Axes Pass or Fast Axis Block

Application

Fiber Laser
 Surgical Equipment
 Gas Sensor System



Specifications

| Parameters | Unit | Single Stage | Dual Stage |
|---|-------------------|--|--------------|
| Center Wavelength | nm | 1850 | |
| Peak isolation | dB | 35 | 48 |
| Min Isolation ($\lambda c \pm 15\text{nm}, 23^\circ\text{C}$) | dB | 23 | 38 |
| Typ. IL ($\lambda c \pm 20\text{nm}, 23^\circ\text{C}$) | dB | 0.60 | 0.70 |
| Insertion Loss ($\lambda c \pm 20\text{nm}, -5 \sim +70^\circ\text{C}$) | dB | ≤ 0.70 | ≤ 0.80 |
| Polarization Dependent Loss (PDL) (for SMF) | dB | ≤ 0.05 | ≤ 0.10 |
| PER (for PMF) | Both Axes Pass | dB ≥ 20 | |
| | Fast Axis Blocked | dB ≥ 23 | |
| Return Loss (Input / Output) (RL) | dB | $\geq 60/55$ | $\geq 60/55$ |
| Fiber Type | | SMF-28e, SM1950, PM1550, PM1950, PM2000, | |
| Max Power Handling CW | W | 1, 2, 3, 5, 10, 20 | |
| Operating Temperature | $^\circ\text{C}$ | $-0 \sim +75$ | |
| Storage Temperature | $^\circ\text{C}$ | $-40 \sim +85$ | |

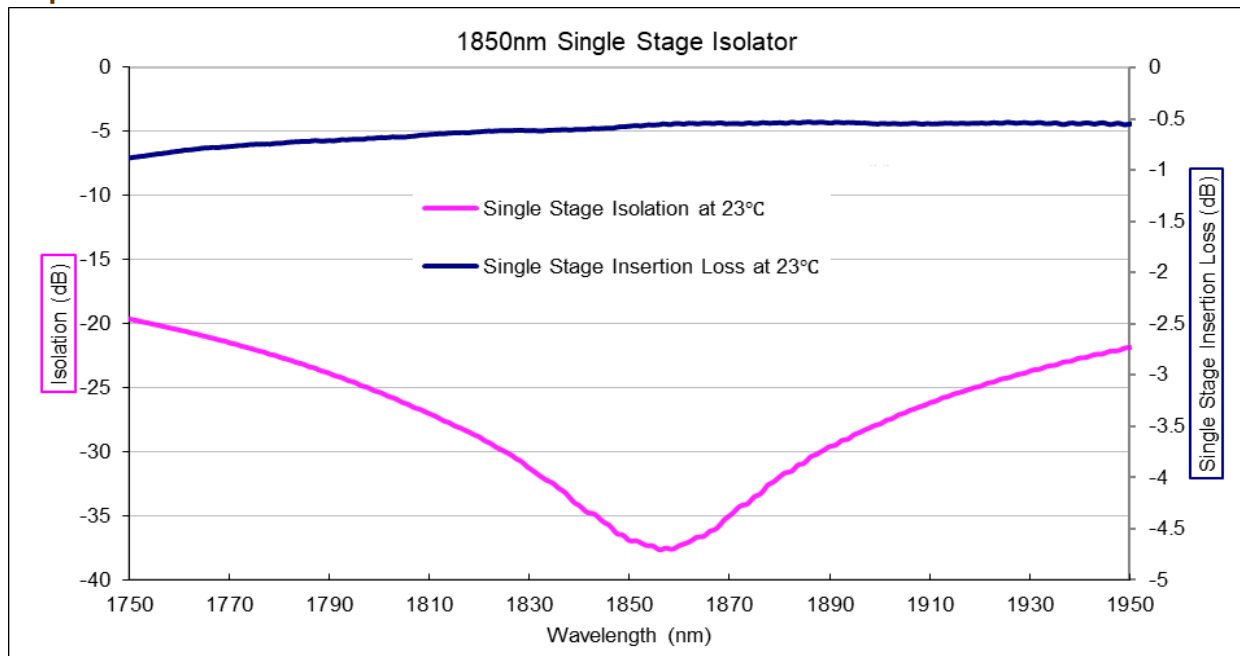
Above data test at room temperature without connectors. With connectors, IL+0.3dB, RL-5dB, PER-2dB.

Optical Power 1W only after connector added.

Default connector key is aligned to slow axis.

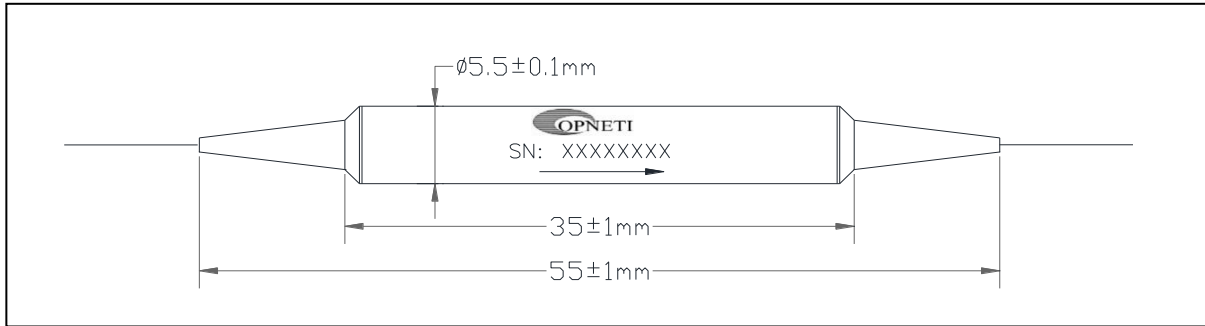
Default FC connector key width 2.02mm (narrow key), 2.12mm (wide key) available on request.

Typical Spectrum

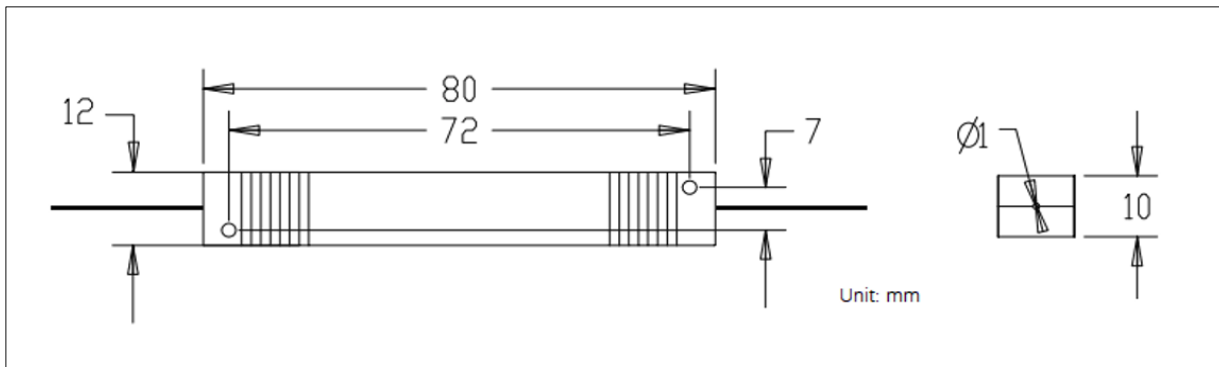


Package Information

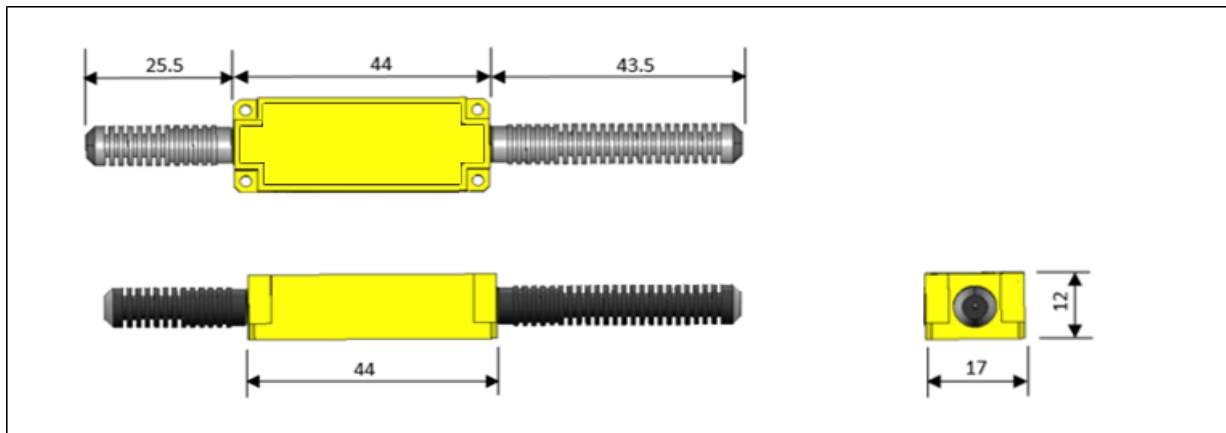
| | | | |
|-------------------|--|--|---------------------|
| Fiber Length | 1m, others on request | | |
| Pigtail Type | 250 μm Bare Fiber | 900 μm Loose Tube | 2mm/3mm Loose Cable |
| Dimensions(mm) | $\phi 5.5 \times 35, 80 \times 12 \times 10$ | $\phi 5.5 \times 35, 80 \times 12 \times 10$ | 90x16x9 |
| Approx Weight (g) | 35 | 50 | 65 |



for 1~5 W



for 6~10W



for 11~20W

Ordering Information

HPIS- ①-②②②②-③-④④④-⑤-⑥-⑦⑦-⑧⑧⑧⑧⑧⑧-⑨⑨
 HPMIS-

| | | |
|---|----------------|--|
| ① | Type | S=Single Stage; D=Dual Stage; |
| ② | Wavelength | 1850; |
| ③ | Axis Alignment | F=Fast Axis Blocked; B=Both Axes Working; |
| ④ | Pigtail Type | 250=250μm Fiber; 900=900μm Loose Tube; 2000=2mm Loose Cable; 3000=3mm Loose Cable; |
| ⑤ | Fiber Type | 1=SMF-28e; S9=SM1950; P15=PM1550; P19=PM1950; P20=PM2000; |
| ⑥ | Fiber Length | 1=1m; XX=other; |
| ⑦ | Connector | NE=None; FA=FC/APC; FC=FC/UPC; SA=SC/APC; SC=SC/UPC; LC=LC/UPC; XX=Others; |
| ⑧ | Package size | 5.5x35; 80x12x10; |
| ⑨ | Power Handling | 1W; 2W; 3W; 5W; 10W; 20W |