

## 1850nm Polarization Insensitive / Sensitive Isolator (IS)

### Features

- Wide Operating Wavelength
- High Isolation & Low Insertion Loss
- Low PDL
- Telcordia GR-1221 Compliant
- Polarization Insensitive and Polarization Sensitive (Dependent)

### Application

- Fiber Amplifier
- Fiber Laser
- Surgical Equipment

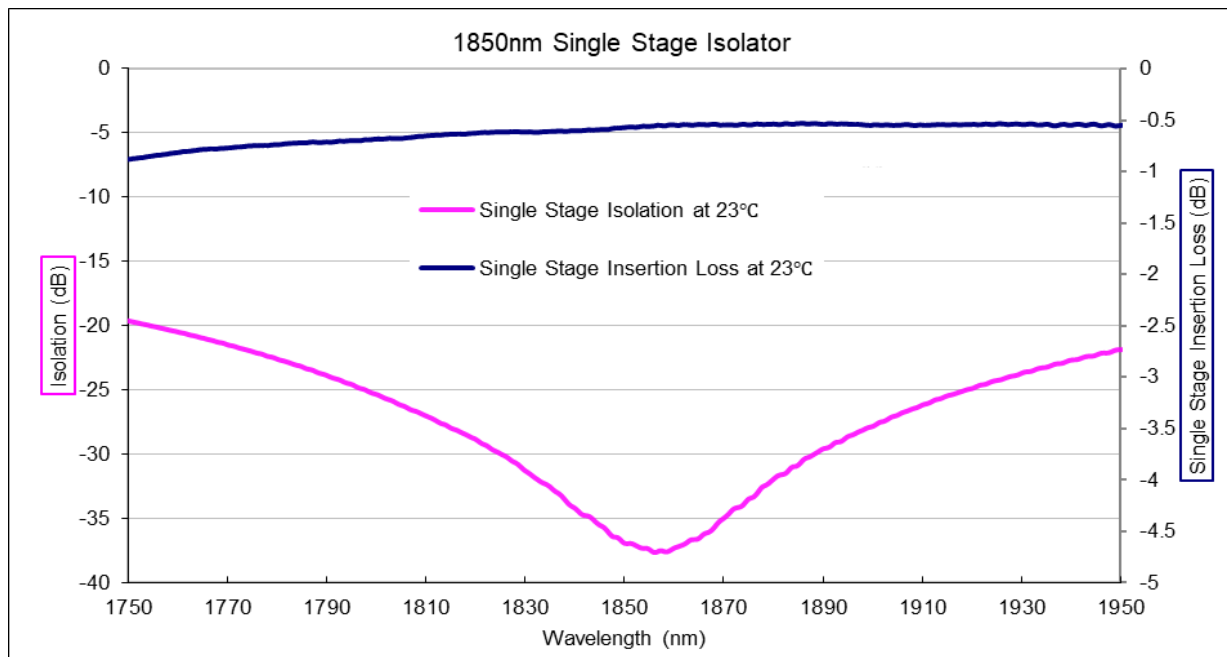


### Specifications

Parameters	Unit	Single Stage	Dual Stage
Center Wavelength	nm	1850	
Peak isolation	dB	35	48
Min Isolation ( $\lambda \pm 15\text{nm}, 23^\circ\text{C}$ all sop)	dB	23	38
Typ. IL ( $\lambda \pm 20\text{nm}, 23^\circ\text{C}$ all sop) with SMF-28	dB	0.60	0.70
Typ. IL ( $\lambda \pm 20\text{nm}, 23^\circ\text{C}$ all sop) with SM1950	dB	0.80	1.00
Insertion Loss ( $\lambda \pm 20\text{nm}, -5 \sim +70^\circ\text{C}$ all sop) with SMF-28 Fiber	dB	$\leq 0.70$	$\leq 0.80$
Insertion Loss ( $\lambda \pm 20\text{nm}, -5 \sim +70^\circ\text{C}$ all sop) with SM1950 Fiber	dB	$\leq 0.90$	$\leq 1.10$
Polarization Dependent Loss (PDL)	Polarization Insensitive	dB	$\leq 0.15$
	Polarization Sensitive	dB	$\geq 20$
PMD	ps	$\leq 0.2$	$\leq 0.05$
Return Loss (Input / Output) (RL)	dB	$\geq 60/55$	$\geq 60/55$
Fiber Type		SMF-28e, SM1950	
Max Power Handling CW	mW	500	
Operating Temperature	$^\circ\text{C}$	$-0 \sim +75$	
Storage Temperature	$^\circ\text{C}$	$-40 \sim +85$	

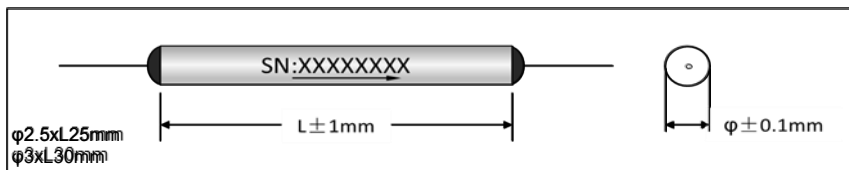
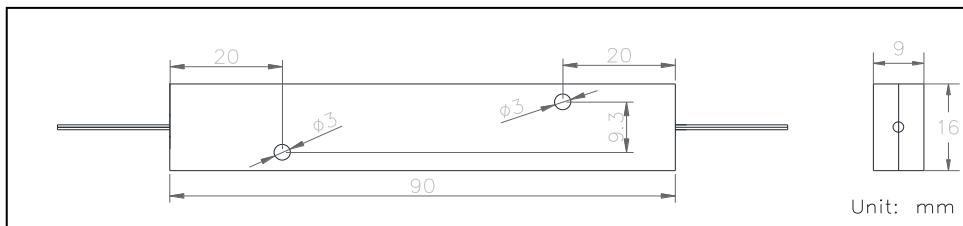
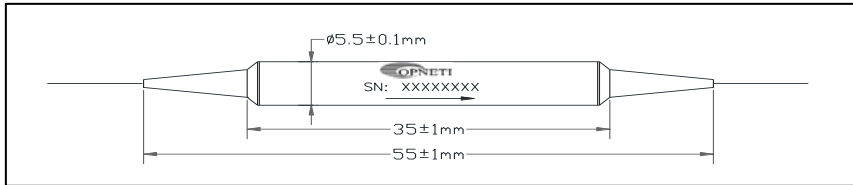
Above data test at room temperature without connectors. With connectors, IL+0.3dB, RL-5dB.

### Typical Spectrum



**Package Information**

Fiber Length	1m, others on request		
Pigtail Type	250µm Bare Fiber	900µm Loose Tube	2mm/3mm Loose Cable
Dimensions(mm)	φ2.5x25, φ3x25, φ3x30, φ5.5x35,	φ5.5x35, 90x16x9	φ5.5x35(no boot), 90x16x9
Approx Weight (g)	35	50	65



**Ordering Information**

IS- ①-②②②②②-③-④④④-⑤-⑥-⑦⑦

①	Type	S=Single Stage; D=Dual Stage;
②	Wavelength	1850;
③	Axis Alignment	1=Polarization Sensitive; 2=Polarization Insensitive;
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;
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;