

## 2090nm High Power PM Inline Optical Isolator

### FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging

### APPLICATIONS

- Fiber Optic Amplifiers
- Fiber Optic Instruments
- WDM Systems
- Transmitters and Fiber Lasers
- CATV Networks



### SPECIFICATIONS

Parameter	Unit	Single Stage	Dual Stage
Center Wavelength ( $\lambda_c$ )	nm	2090	
Isolation ( $\lambda_c \pm 10\text{nm}$ , 23°C)	dB	$\geq 16$	$\geq 30$
Insertion Loss ( $\lambda_c$ , 23°C)	dB	$\leq 1.4$	$\leq 1.9$
Insertion Loss ( $\lambda_c \pm 10\text{nm}$ , 23°C)	dB	$\leq 2.0$	$\leq 2.5$
Optical Return Loss (Input/Output)	dB	50/45	50/45
Extinction Ratio	dB	$\geq 18$	
Working Mode	S Type	-	Can only work in Slow Axis
	F Type	-	Can work both in Slow Axis and Fast Axis
Fiber Type	-	PM1550 Panda Fiber or PM1950 Fiber (V) 10/130um PMDC Fiber (O) or 25/250um PMDC Fiber (R)	
Fiber Tensile Load	N	5	
Maximum Optical Power (CW)	mW	1, 2	
Operating Temperature	°C	0~50	
Storage Temperature	°C	-20~75	
Package	Stainless Steel Tube (SST)	mm	( $\Phi$ )5.5x35
Dimension	Metal Box-M	mm	(L)120x(W)12x(H)10

- Note:**
1. Specifications are for device without connectors; Specifications may change without notice.
  2. To add connectors, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
  3. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  4. Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.

### ORDERING INFORMATION (PN)

<b>FPIS-NNNN</b>	<b>- C</b>	<b>C</b>	<b>-HP NN</b>	<b>-(C)</b>	<b>C</b>	<b>C</b>	<b>NN</b>	<b>-CC/CCC</b>
<i>Center Wavelength</i>	<i>Stage</i>	<i>Type</i>	<i>Optical Power</i>	<i>Package</i>	<i>Fiber Type</i>	<i>Fiber Sleeve</i>	<i>Fiber Length</i>	<i>Connector Type</i>
2090- 2090nm	S- Single Stage	S- S Type	1-1W	M- Metal Box	2-PM1550Fiber	B- Bare fiber	05-0.5m	N-Without Connector
	D- Dual Stage	F- F Type	2-2W	Blank for SST	V-PM1950 Fiber	L- Loose Tube	10-1.0m	FC/APC=FC/APC Connector
					O-10/130 PMDC Fiber	2- 2mm Cable	15-1.5m	LC/PC=LC/PC Connector
					R-25/250 PMDC Fiber	3- 3mm Cable	20-2.0m	SC/UPC=SC/UPC Connector