

## Polarization Insensitive Optical Isolator for Pulse Power

### FEATURES

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

### APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Metro Networks
- CATV Networks



### SPECIFICATIONS

Parameter	Unit	Single Stage	Dual Stage	H Stage
Center Wavelength ( $\lambda_c$ )	nm	1310, 1480, 1550, 1590		
Peak Isolation (Typ.)	dB	42	58	35
Isolation ( $\lambda_c \pm 15\text{nm}$ , 23°C, All SOP)	dB	$\geq 28$	$\geq 45$	$\geq 25$
Insertion Loss ( $\lambda_c$ , 23°C, All SOP)	dB	$\leq 0.35$	$\leq 0.4$	$\leq 0.5$
Insertion Loss ( $\lambda_c \pm 20\text{nm}$ , 0-70°C, All SOP)	dB	$\leq 0.55$	$\leq 0.65$	$\leq 0.8$
Optical Return Loss (Input/Output)	dB	60/55	60/55	55/50
Polarization Dependent Loss	dB	$\leq 0.05$	$\leq 0.10$	$\leq 0.20$
Polarization Mode Dispersion	ps	$\leq 0.25$	$\leq 0.05$	$\leq 0.20$
Fiber Type	-	SMF-28 Fiber or 10/130um DC Fiber (O) 12/130um DC Fiber (T) or 20/130um DC Fiber (Q) 25/250um DC Fiber (R) or 25/300um DC Fiber (G)		
Fiber Tensile Load	N	5		
Max. Average Optical Power	W	0.3, 0.5, 1, 2, 3, 5, 10		15, 20, 30
Max. Peak Power for Pulse	kW	0.1, 1, 2, 3, 5, 10, 20		
Operating Temperature	°C	0~50		
Storage Temperature	°C	-40~85		
Package Dimension	Stainless Steel Tube (SST)	mm	$\Phi 5.5 \times L35$ ( $\leq 5\text{W}$ ), $\Phi 6.0 \times L50$ ( $> 5\text{W}$ )	
	Metal Box-M	mm	$L120 \times W12 \times H10$	

**Note:** 1. SOP= State of Polarization

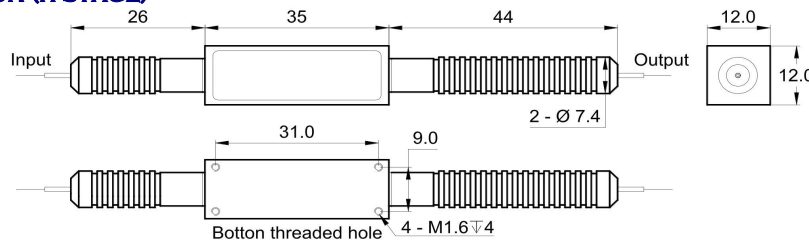
2. Specifications are for device without connectors; Specifications may change without notice.

3. To add connectors, IL is 0.3dB higher, RL is 5dB lower.

4. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.

5. Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of the Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.

### PACKAGE DIMENSION (H STAGE)



### ORDERING INFORMATION (PN)

Center Wavelength	Stage	Average Power	Peak Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
1310-1310nm	S= Single Stage	05= 500mW	01=100W	M= Metal Box	O=10/130 DC Fiber	B= Bare Fiber	05=0.5m	N= Without Connector
1550-1550nm	D= Dual Stage	1= 1 Watts	1= 1kW	Blank for SST	T=12/130 DC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
1480-1480nm	H= H Stage	5= 5 Watts	5=5kW		G=25/300 DC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector
1590-1590nm		10= 10 Watts	10=10kW		Blank for SMF-28 Fiber	3= 3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector

