

Optical Isolator

Features:

- Wide Operating Wavelength & Temperature Range
- Low Insertion Loss & High Isolation
- Ultra Low PDL & PMD
- Epoxy-Free in Optical Path

Applications:

- EDFA
- WDM & DWDM Systems
- Fiber Optic Instruments
- Transmitters & Fiber Laser



Single Stage Optical Isolator

Specifications^{1,2}:

Parameter	Unit	Grade "U"*	Grade "P"	Grade "A"
Central Wavelength ³ (λ_c)	nm		1310, 1550, 1590	
Isolation ($\lambda_c \pm 15$ nm, 23 °C, All SOP)	Min. dB	32	32	30
Isolation ($\lambda_c \pm 15$ nm, 0~70 °C, All SOP)	Min. dB	22	22	20
Insertion Loss (λ_c , 23 °C, All SOP)	Typ. dB	0.20	0.30	0.40
Insertion Loss ($\lambda_c \pm 20$ nm, 0~70 °C, All SOP)	Max. dB	0.30	0.40	0.60
PDL (λ_c , 23 °C, All SOP)	Max. dB	0.05	0.05	0.10
PMD	Max. ps	0.20	0.20	0.20
Return Loss (Input/Output)	Min. dB	65/60	65/60	60/60
Fiber Type		Corning SMF-28		
Fiber Length	Min. m	1.0		
Power Handling ⁴	Max. mW	1,000		
Operating Temperature	°C	0~70		
Storage Temperature	°C	-40~85		
Package Dimension	mm	$(\phi)5.5 \times (L)32$		

* "U" here means ultra low insertion loss.

Dual Stage Optical Isolator

Specifications^{1,2}:

Parameter	Unit	Grade "U"*	Grade "P"	Grade "A"
Central Wavelength ³ (λ_c)	nm		1310, 1550, 1590	
Peak Isolation	Min. dB	65	58	55
Isolation ($\lambda_c \pm 15$ nm, 23 °C, All SOP)	Min. dB	60	-	-
Isolation ($\lambda_c \pm 30$ nm, 23 °C, All SOP)	Min. dB	50	46	45
Isolation ($\lambda_c \pm 50$ nm, 23 °C, All SOP)	Min. dB	45	-	-
Isolation ($\lambda_c \pm 15$ nm, 0~70 °C, All SOP)	Min. dB	42	38	34
Insertion Loss (λ_c , 23 °C, All SOP)	Typ. dB	0.40	0.40	0.60
Insertion Loss ($\lambda_c \pm 20$ nm, 0~70 °C, All SOP)	Max. dB	0.60	0.60	0.80
PDL (λ_c , 23 °C, All SOP)	Max. dB	0.05	0.05	0.10
PMD	Max. ps	0.05	0.05	0.07
Return Loss (Input/Output) (λ_c , 23 °C)	Min. dB	65/60	65/60	60/60
Fiber Type		Corning SMF-28		
Fiber Length	Min. m		1.0	
Power Handling ⁴	Max. mW		1,000	
Operating Temperature	°C		0~70	
Storage Temperature	°C		-40~85	
Package Dimension	mm		(ϕ)5.5 × (L)32	

* "U" here means ultra high isolation.

PMD Compensated Optical Isolator

Specifications^{1,2}:

Parameter	Unit	Grade "U"*	Grade "P"	Grade "A"
Central Wavelength ³ (λ_c)	nm		1310, 1550, 1590	
Isolation ($\lambda_c \pm 15$ nm, 23 °C, All SOP)	Min. dB	32	32	30
Isolation ($\lambda_c \pm 15$ nm, 0~70 °C, All SOP)	Min. dB	22	22	20
Insertion Loss (λ_c , 23 °C, All SOP)	Typ. dB	0.30	0.30	0.40
Insertion Loss ($\lambda_c \pm 20$ nm, 0~70 °C, All SOP)	Max. dB	0.50	0.50	0.60
PDL (λ_c , 23 °C, All SOP)	Max. dB	0.05	0.05	0.10
PMD	Max. ps	0.02	0.05	0.05
Return Loss (Input/Output) (λ_c , 23 °C)	Min. dB	65/60	65/60	60/60
Fiber Type		Corning SMF-28		
Fiber Length	Min. m		1.0	
Power Handling ⁴	Max. mW		1,000	
Operating Temperature	°C		0~70	
Storage Temperature	°C		-40~85	
Package Dimension	mm		(ϕ)5.5 × (L)32	

* "U" here means ultra low PMD.

1. SOP=State of Polarization.

2. Values referenced without connectors.

3. Central wavelength 1480 nm and 1625 nm are also available.

4. Power handling up to 2,000 mW is also available.

Note: OEM products with different specifications are also available.

Dimension:

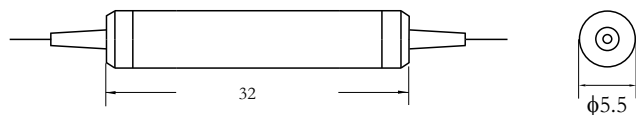


Figure 1. Optical Isolator

Order Information:

KISO - $\frac{X}{|}$ - $\frac{X}{|}$ - $\frac{XXXX}{|}$ - $\frac{XXXX}{|}$ - $\frac{X}{|}$
 A B C D E

A	Type	S=Single stage
		D=Dual stage
		C=PMD compensated
B	Grade	U=Grade "U"
		P=Grade "P"
		A=Grade "A"
C	Fiber Type	250S=250 μm bare fiber
		900L=900 μm loose tube
		900T=900 μm tight buffer fiber
D	Wavelength	1310=1310 nm
		1550=1550 nm
		1590=1590 nm
E	Connector	N=W/O connector
		Y=With connector ¹

1. Please specify the type of connector when ordering.