

# ISOLATOR

- In-Line Polarization Insensitive Wideband Isolator
- In-Line Polarization Insensitive L-Band Isolator
- In-Line Polarization Insensitive Single Stage Isolator
- In-Line Polarization Insensitive Dual Stage Isolator

# IN-LINE POLARIZATION INSENSITIVE WIDEBAND ISOLATOR

## Features

- High isolation
- Low insertion loss
- Low polarization sensitivity
- Environmental stability and reliability
- Optical path epoxy free
- Low PMD

## Applications

- EDFA
- Fiber optic system testing
- Telecommunications

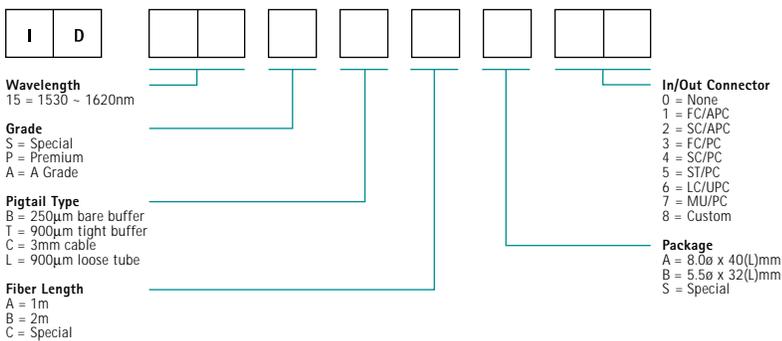


## Specifications

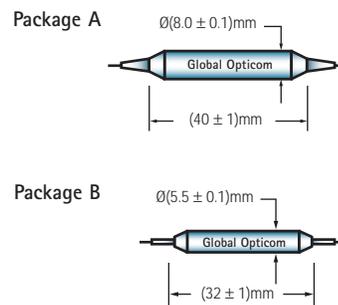
Parameter	Premium	A Grade
Operating wavelength ( nm )	1530 ~ 1620	
Peak isolation ( Typ. ) ( dB )	≥ 52	≥ 47
Min. isolation ( dB ) ( λc = 1530 - 1620nm @ 23°C, SOP )	≥ 45	≥ 41
Insertion loss ( Typ. ) ( dB )	≤ 0.65	≤ 0.8
Max. insertion loss ( dB ) ( λc = 1530 - 1620nm @ 0 to 60°C, SOP )	≤ 0.9	≤ 1.2
Return loss ( dB ) ( input/output )	≥ 65/60	≥ 60/55
Polarization dependent loss ( dB )	< 0.05	< 0.10
Operating temperature ( °C )	-20 ~ +65	
Storage temperature ( °C )	-40 ~ +85	
Max. power ( mW )	300	

All specifications referenced are without connectors.  
Low PMD ( ≤ 0.05ps ) is available upon request.

## Ordering Information



## Dimensions



# IN-LINE POLARIZATION INSENSITIVE L-BAND ISOLATOR

## Features

- High isolation
- Low insertion loss
- Low polarization sensitivity
- Environmental stability and reliability
- Optical path epoxy free

## Applications

- EDFA
- Fiber optic system testing
- Fiber optic LAN systems
- Telecommunications

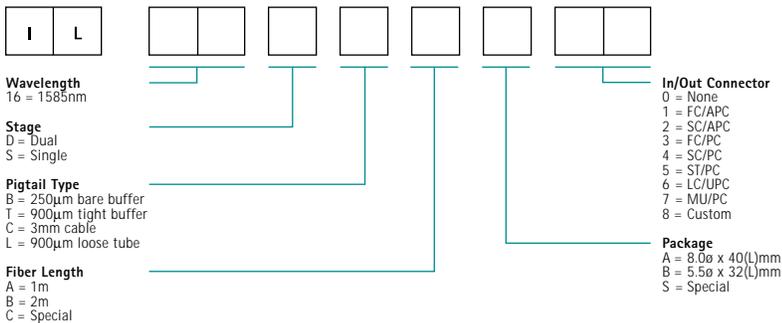


## Specifications

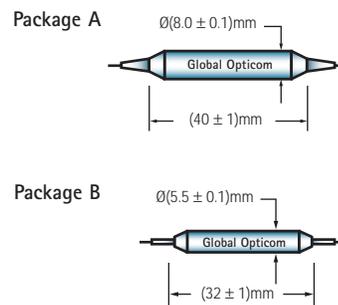
Parameter	Dual Stage	Single Stage
Operating wavelength ( nm )	1585 ± 30	
Peak isolation ( Typ. ) ( dB ) ( λc )	≥ 58	≥ 42
Min. isolation ( dB ) @ 23°C, SOP	≥ 46 @ λc ± 30nm	≥ 32 @ λc ± 15nm
Insertion loss ( Typ. ) ( dB )	0.5	0.4
Max. insertion loss ( dB ) ( λc ± 20nm @ 0 - 60°C, SOP )	0.7	0.6
Return loss ( dB ) ( input/output )	≥ 65/60	≥ 65/60
Polarization dependent loss ( dB )	< 0.08	< 0.08
Operating temperature ( °C )	-20 ~ +65	
Storage temperature ( °C )	-40 ~ +85	
Max. power ( mW )	300	

All specifications referenced are without connectors.  
Low PMD is available upon request.

## Ordering Information



## Dimensions



# IN-LINE POLARIZATION INSENSITIVE SINGLE STAGE ISOLATOR

## Features

- High isolation
- Low insertion loss
- Low polarization sensitivity
- Environmental stability and reliability
- Optical path epoxy free

## Applications

- EDFA
- Fiber optic systems testing
- Fiber optic LAN systems
- Telecommunications

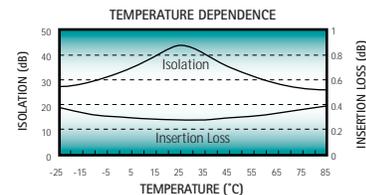
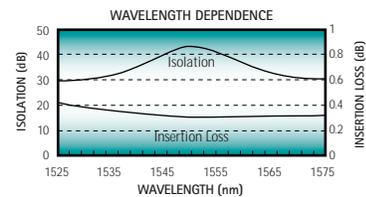
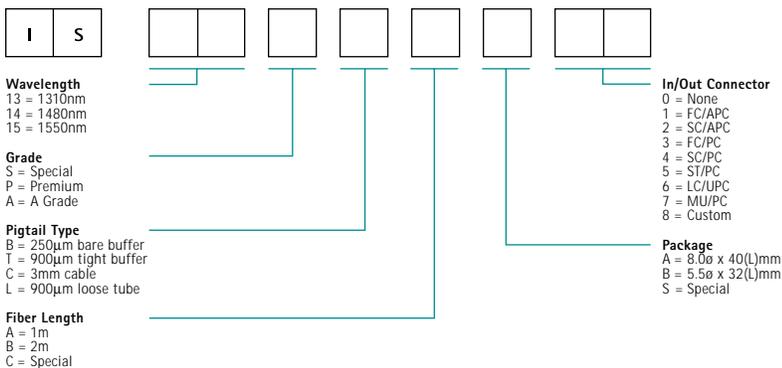


## Specifications

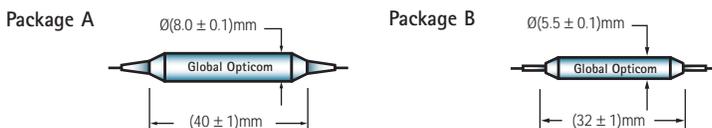
Parameter	Premium	A Grade
Operating wavelength ( nm )	1310, 1480, 1550 ( ±15 )	
Peak isolation ( Typ. ) ( dB )	≥ 42	≥ 40
Min. isolation ( dB ) ( λc ±15nm @ 23°C, SOP )	≥ 32	≥ 30
Insertion loss ( Typ. ) ( dB )	0.3	0.4
Max. insertion loss ( dB ) ( λc ±15nm @ 0 - 60°C, SOP )	0.5	0.7
Return loss ( dB ) ( input/output )	≥ 65/60	≥ 60/55
Polarization dependent loss ( dB )	< 0.05	< 0.1
Operating temperature ( °C )	-20 ~ +65	
Storage temperature ( °C )	-40 ~ +85	
Max. power ( mW )	300	

All specifications referenced are without connectors.  
Low PMD is available upon request.

## Ordering Information



## Dimensions



# IN-LINE POLARIZATION INSENSITIVE DUAL STAGE ISOLATOR

## Features

- High isolation
- Low insertion loss
- Low polarization sensitivity
- Environmental stability and reliability
- Optical path epoxy free
- Low PMD

## Applications

- EDFA
- Fiber optic systems testing
- Fiber optic LAN systems
- Telecommunications



## Specifications

Parameter	Super	Premium	A Grade
Operating wavelength ( nm )	1310, 1480, 1550 ± 30		
Peak isolation ( Typ. ) ( dB )	58	≥ 58	≥ 54
Min. isolation ( dB ) ( λc ±30nm @ 23°C, SOP )	46	≥ 46	≥ 45
Insertion loss ( Typ. ) ( dB )	≤ 0.4	≤ 0.4	≤ 0.55
Max. insertion loss ( dB ) ( λc ±20nm @ 0 - 60°C, SOP )	≤ 0.5	≤ 0.6	≤ 0.8
Return loss ( dB ) ( input/output )	≥ 65/60	≥ 65/60	≥ 60/55
Polarization dependent loss ( dB )	< 0.05	< 0.05	< 0.1
Operating temperature ( °C )	-20 ~ +65		
Storage temperature ( °C )	-40 ~ +85		
Max. power ( mW )	300		
PMD	< 0.05ps	< 0.1ps	< 0.2ps

All specifications referenced are without connectors.

## Ordering Information

I	U								
---	---	--	--	--	--	--	--	--	--

**Wavelength**  
 13 = 1310nm  
 14 = 1480nm  
 15 = 1550nm

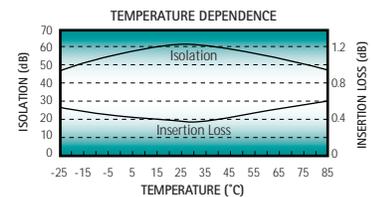
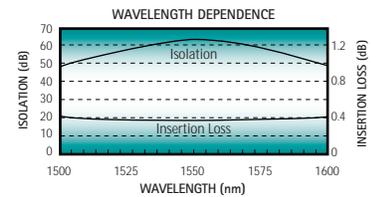
**Grade**  
 S = Special  
 P = Premium  
 A = A Grade

**Pigtail Type**  
 B = 250µm bare buffer  
 T = 900µm tight buffer  
 C = 3mm cable  
 L = 900µm loose tube

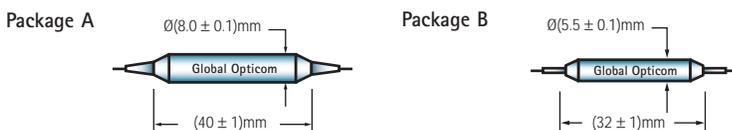
**Fiber Length**  
 A = 1m  
 B = 2m  
 C = Special

**In/Out Connector**  
 0 = None  
 1 = FC/APC  
 2 = SC/APC  
 3 = FC/PC  
 4 = SC/PC  
 5 = ST/PC  
 6 = LC/U/PC  
 7 = MU/PC  
 8 = Custom

**Package**  
 A = 8.0ø x 40(L)mm  
 B = 5.5ø x 32(L)mm  
 S = Special



## Dimensions



# NOTES