Optical Isolator

Features and Benefits

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

Corning offers single-stage and dual-stage optical isolators which minimize back reflection and back scattering in the reverse direction at any state of polarization. The Polarization Insensitive Isolator (PII) is a low-cost model with excellent performance, including low insertion loss, high isolation, high return loss, and low PDL and PMD. It is available in both C and L band.

Standards

RoHS	Free of hazardous substances according to RoHS2011/65/EU
Design and Test Criteria	Product is qualified to Telcordia GR-1209-CORE and GR-1221-CORE

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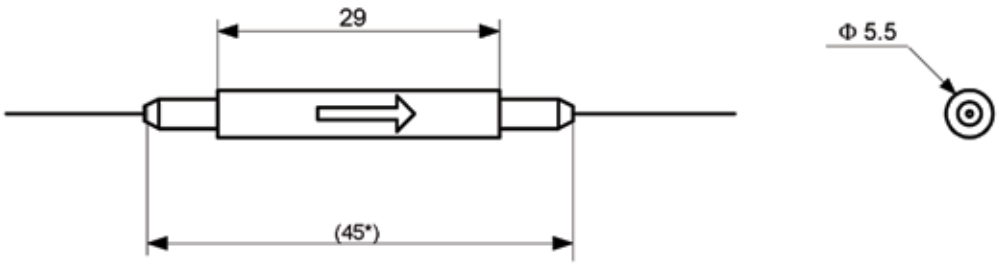
CORNING

Specifications – Optical Isolator

Parameters	Single-Stage		
	Ultra	Premium	Standard
Center Wavelength (λc)		1310, 1550, or 1590 nm	
Isolation (λc ± 15 nm, 23°C, All SOP), Minimum	30 dB	30 dB	30 dB
Isolation (λc ± 15 nm, 0-70°C, All SOP), Minimum	21 dB	21 dB	20 dB
Insertion Loss (λc, 23°C, All SOP), Typical	0.30 dB	0.35 dB	0.40 dB
Insertion Loss (λc ± 20 nm, 0-70°C, All SOP), Maximum	0.40 dB	0.50 dB	0.60 dB
PDL, Maximum	0.05 dB	0.05 dB	0.10 dB
PMD, Maximum	0.30 ps	0.30 ps	0.30 ps
Return Loss (Input/Output), Minimum		60/60 dB	
Power Handling		500 mW	
Operating Temperature		0°C to +70°C	
Storage Temperature		-40°C to +85°C	

Shipping Package		
Packaging Dimensions	Fiber Type	Pigtail Length
(Φ) 5.5 mm x (L) 45* mm Including boots	Corning® MF-28e®; 250 µm Fiber	1 m (Standard)

Note:
**250 µm bare fiber; our 900 µm buffer solution is at 49 mm length*



Optical Isolator

Specifications – Optical Isolator

Parameters	Single-Stage PMD Compensated			Dual-Stage PMD Compensated		
	Ultra	Premium	Standard	Ultra	Premium	Standard
Center Wavelength (λc)	1310, 1550, 1590 nm			1310, 1550, 1590 nm		
Peak Isolation, Minimum	-	-	-	60 dB	58 dB	55 dB
Isolation (λc ± 15 nm, 23°C, All SOP), Minimum	30 dB			55 dB	-	-
Isolation (λc ± 30 nm, 23°C, All SOP), Minimum	-	-	-	48 dB	46 dB	45 dB
Isolation (λc ± 15 nm, 0-70°C, All SOP), Minimum	21 dB	21 dB	20 dB	42 dB	38 dB	34 dB
Insertion Loss (λc, 23°C, All SOP), Typical	0.30 dB	0.35 dB	0.40 dB	0.40 dB	0.40 dB	0.60 dB
Insertion Loss (λc ± 20 nm, 0-70°C, All SOP), Maximum	0.50 dB	0.50 dB	0.60 dB	0.55 dB	0.55 dB	0.70 dB
Insertion Loss (λc ± 30 nm, 0-70°C, All SOP), Maximum	-	-	-	0.60 dB	0.60 dB	0.80 dB
PDL, Maximum	0.05 dB	0.05 dB	0.10 dB	0.05 dB	0.05 dB	0.10 dB
PMD, Maximum	0.02 ps	0.05 ps	0.05 ps	0.05 ps	0.05 ps	0.07 ps
Return Loss (Input/Output), Minimum	60/60 dB	60/60 dB	60/55 dB	60/60 dB	60/55 dB	60/55 dB
Power Handling, Maximum	500 mW			500 mW		
Operating Temperature	0°C to +70°C			0°C to +70°C		
Storage Temperature	-40°C to +85°C			-40°C to +85°C		

Ordering Information

Optical Isolator

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1 Select Type
1: Single-Stage
2: PMD Compensated Single-Stage
3: PMD Compensated Dual-Stage

2 Select Wavelenth
31: 1310 nm
55: 1550 nm
59: 1590 nm

3 Select Grade
1: Standard
2: Premium
3: Ultra

4 Select Fiber Type
0: 250 µm Bare Fiber
1: 900 µm Loose Tube
2: 900 µm Tight Fiber

5 Select Connector*
A: None
L : LC/PC
P: FC/PC
Q: FC/APC
S: SC/PC
T: SC/APC
U: MU/PC

6 Select Customization
000: Running number used for special types or custom made

These part numbers are specific to Corning Optical Communications OEM Solutions Business Unit. Please contact OEM sales at +1-408-736-6900 or oemsales@corning.com and visit www.corning.com/opcomm/oem for sales support.

RoHS COMPLIANT

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