

Optical Circulator (Three-Port)

CORNING

Features and Benefits

Ultra-Low PDL and PMD

High Return Loss

High Isolation

Low Insertion Loss

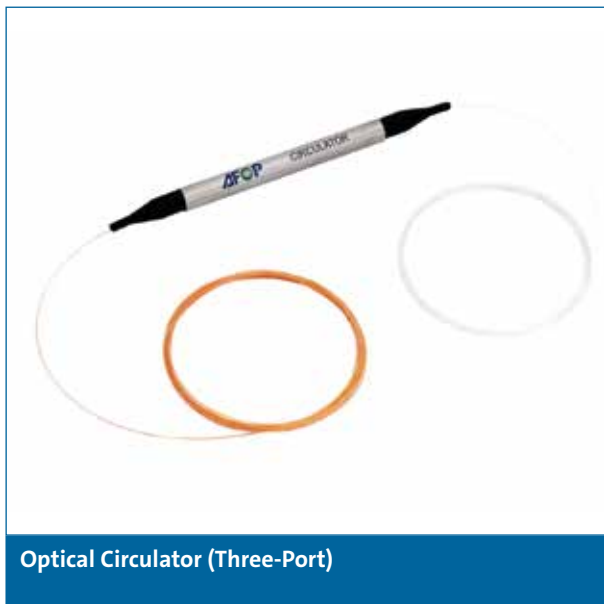
Epoxy-Free in Optical Path

Optical circulators are non-reciprocal devices that redirect light from port-to-port sequentially in only one direction. In advanced optical communication systems, circulators are used for bi-directional transmissions, WDM networks, fiber amplifier systems, and for optical time domain reflectometer (OTDR) measurements. Corning's circulator features small package, high isolation over a wide wavelength range, low insertion loss, low PDL, and excellent stability.

Standards

RoHS	Free of hazardous substances according to RoHS2011/65/EU
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Design and Test Criteria	Product is qualified to Telcordia GR-1209-CORE and GR-1221-CORE
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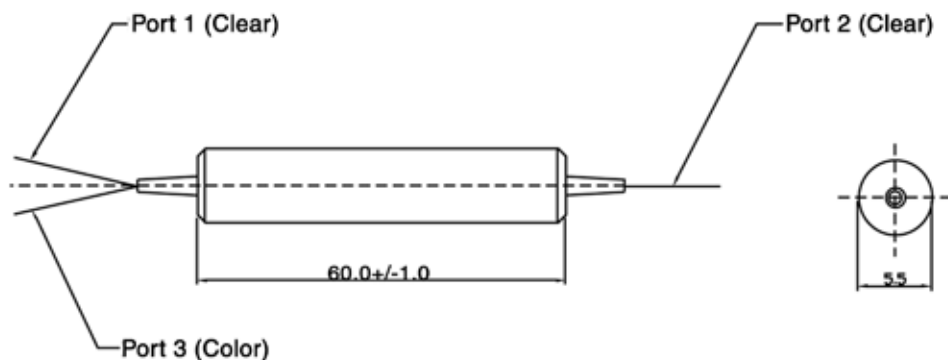
Specifications – Optical Circulator (Three-Port)

Parameters	Standard			Preium		
	Minimum	Typical	Maximum	Minimum	Typical	Maximum
Center Wavelength λ_c	1310 or 1550 nm			1310 or 1550 nm		
Isolation ($\lambda_c \pm 20$ nm, 23°C, 2-1 or 3-2)	40 dB	50 dB		40 dB	50 dB	
Insertion Loss ($\lambda_c \pm 15$ nm, 23°C)	0.8 dB			0.6 dB		
Insertion Loss ($\lambda_c \pm 20$ nm, 0-70°C, All SOP)	1.0 dB			0.8 dB		
WDL			0.20 dB			0.20 dB
Directivity	50 dB			50 dB		
PDL			0.20 dB			0.15 dB
Return Loss	50 dB			50 dB		
Power Handling	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		
Tensile Load	5N			5N		

Shipping Package

Packaging Dimensions	Pigtail Length
(Φ) 5.5 mm x (L) 60.0 mm	1 m (Standard)

Three-Port Circulator



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Ordering Information

Optical Circulator (Three-Port)

C R - 1 -

1 2 3 4 5 6

1 Select Type
3: Three-port

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

3 Select Grade
1: Standard
2: Premium

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

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 oesales@corning.com and visit www.corning.com/opcomm/oem for sales support.



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Spec Sheet CAH-140_AEN
Page 3 | Revision date 2016-12-02

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