



passive components

Single and Dual Stage Isolators

Description

Renka® SmartCONNECT™ singlemode optical isolators are passive, non-reciprocal, fiber-pigtailed devices that are designed to minimize back reflection and back scattering in an optical system. Two models of isolators are available to meet the application isolation requirement.

Renka isolators are designed and tested to Bellcore GR-2882 performance standards.



Applications

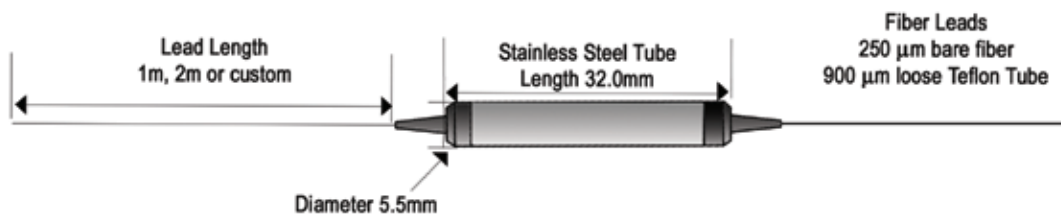
- Optical Amplifier (EDFA, Raman)
- CATV Fiber Optics Link
- WDM and DWDM Systems
- Fiber Optic Instruments
- Transmitters and Fiber Laser
- Laboratory R&D

Benefits

- Wide Operating Wavelength and Temperature Range
- Low Insertion Loss
- High Isolation
- Ultra Low PDL and PMD
- Highly Stable and Reliable
- Epoxy Free Optical Path

Package Dimensions

Light/Medium Duty



Single Stage Optical Isolator Specifications

		UNIT	Premium	Standard
Peak Isolation	Typ.	dB	42	40
Isolation ($\lambda_c \pm 15\text{nm}$, 23°C, all SOP)	Min.	dB	32	30
Insertion Loss ($\lambda_c \pm 20\text{nm}$, 23°C)	Typ.	dB	0.3	0.4
Insertion Loss ($\lambda_c \pm 20\text{nm}$, 0-60°C, all SOP)	Max.	dB	0.5	0.7
Return Loss (Input/Output)	Min.	dB	65/60	60/55
PDL	Max.	dB	0.05	0.1
PMD	Max.	ps	0.20/0.1	0.25/0.1
Operating Wavelength		nm	1310 or 1550	
Operating Temperature		°C	-20 to +60	
Storage Temperature		°C	-40 to +80	

Dual Stage Optical Isolator Specifications

		UNIT	Premium	Standard
Peak Isolation	Typ.	dB	58	53
Isolation ($\lambda_c \pm 15\text{nm}$, 23°C, all SOP)	Min.	dB	46	44
Insertion Loss ($\lambda_c \pm 20\text{nm}$, 23°C)	Typ.	dB	0.4	0.6
Insertion Loss ($\lambda_c \pm 20\text{nm}$, 0-60°C, all SOP)	Max.	dB	0.6	0.9
Return Loss (Input/Output)	Min.	dB	65/60	60/55
PDL	Max.	dB	0.05	0.1
PMD	Max.	ps	0.05	0.07
Operating Wavelength		nm	1310 or 1550	
Operating Temperature		°C	0 to +60	
Storage Temperature		°C	-40 to +80	

Ordering Information

ISO□-□□-□□□-□

Grade

P: Premium
S: Standard

Type

SS: Single Stage
DS: Dual Stage

Wavelength

3: 1310
5: 1550

Package Type

L: Light Duty
M: Medium Duty
H: Heavy Duty

Lead Length

1: 1 meter
2: 2 meters
C: Custom

Connector Type

0: None