



hybrid components

WDM/Isolator Hybrid Combinations

Description

Renka® SmartCONNECT™ WDM/Isolator Hybrid is a combination of a thin film WDM and an isolator, integrated into one compact package. These components offer low insertion and polarization dependent loss, which make them an ideal integrated solution for EDFA applications.

Renka Hybrid components are designed and tested to Bellcore GR-1209/GR-1221 performance and reliability industry standards.



Applications

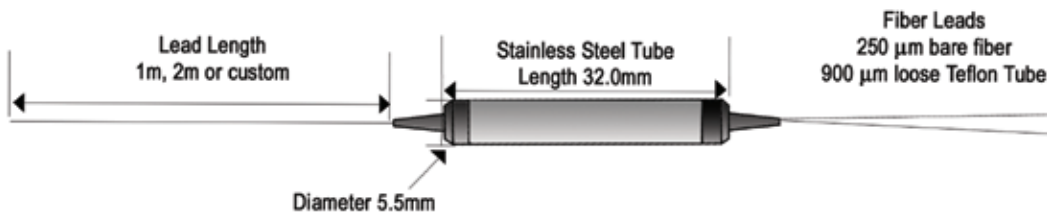
- EDFA
- WDM Systems
- CATV

Benefits

- Wide Wavelength and Temperature Range
- Compact Packaging
- High Isolation
- Highly Stable and Reliable

Package Dimensions

Light/Medium Duty



980/1550 nm WDM/Isolator Hybrid Combination Specifications

	UNIT	SINGLE STAGE	DUAL STAGE
Wavelength Range	nm	C Band: 1528 - 1564	
Signal Channel λ_s	nm	L Band: 1570 - 1605	
Pump Channel Wavelength Range λ_p	nm	965 - 995	
Isolation (Min.) over wavelength range (0 - 70°C, all SOP)	dB	23	40
Wavelength Isolation (Min.) (1 - >3 @ λ_s signal)	dB	12	
Wavelength Isolation (Min.) (1 - >2 to 2 - >1 @ λ_p pump)	dB	30	
Insertion Loss (Max.) Pump Channel	dB	0.6	
Insertion Loss - over wavelength range (0 to +70°C, all SOP) Signal Channel	dB	1.0	1.1
Return Loss (Min.)	dB	55	
PDL (Max.)	dB	0.1	0.1
PMD (Max.)	ps	0.25 / 0.05 (compensated)	
Directivity (Min.)	dB	55	
Maximum Power Handling	mW	500	
Operation Temperature	°C	0 to +70	
Storage Temperature	°C	-40 to +85	
Fiber pigtail		1m Corning Flexcor 1060 fiber at common/pump port 1m Corning SMF-28 fiber at output port	

1480/1550 nm WDM/Isolator Hybrid Combination Specifications

	UNIT	SINGLE STAGE	DUAL STAGE
Wavelength Range	nm	C Band: 1528 - 1564	
Signal Channel λ_s	nm	L Band: 1570 - 1605	
Pump Channel Wavelength Range λ_p	nm	1450 - 1495	
Channel Isolation (Min.) over wavelength range $\lambda_p \pm 15\text{nm}$ (0 - 70°C, all SOP)	dB	23	40
Wavelength Isolation (Min.) (1 - 3 @ λ_s)	dB	15	
Wavelength Isolation (Min.) (1 - 2 to 2 - 1 @ λ_p)	dB	25	
Insertion Loss (Max.) Pump Channel	dB	0.6	
Insertion Loss - over wavelength range λ_p (0 to +70°C, all SOP) Signal Channel	dB	0.9	1.1
Return Loss (Min.)	dB	55	
PDL (Max.)	dB	0.1	0.2
PMD (Max.)	ps	0.25 / 0.05 (compensated)	
Directivity (Min.)	dB	55	
Maximum Power Handling	mW	500	
Operation Temperature	°C	0 to +70	
Storage Temperature	°C	-40 to +85	

Ordering Information

WDMH□-□□-□-□□-□□

Configuration

F: Forward
B: Backward

Type

SS: Single Stage
DS: Dual Stage

Wavelength

1: 980/1550
4: 1480/1550

Package Type

L: Light Duty
(250 μm bare fiber)
M: Medium Duty
(900 μm loose Teflon tube)

Lead Length

1: 1 meter
2: 2 meters
C: Custom

Connector Type

00: None
SU: SU/UPC
SA: SC/APC
FU: FC/UPC
FA: FC/APC
TU: ST/UPC