C++ Variable Gain EDFA

Description

The C++ band EDFA is characterized by excellent optical properties and highreliability.Its flexible working mode and concise interface supports the super C-band amplification and supports gain adjustable.

Key Features

- Support to 120 signal channels
- High gain range and lower NF
- Fast transient control
- Support constant Gain/constant output Power/manual mode
- Customized

Applications

- Backbone network
- MAN, OTN
- DCI

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength Range	nm	1524~1572.3
Max Output Power	dBm	24
Gain Range	dB	15~25
Gain Flatness	dB	1.5
Max NF@25dB Gain	dB	6
PDG	dB	0.3
PMD	ps	0.5
Electrical Parameters		
Operating Current	A	< 6
Operating Voltage	V	5
Communication Interface		UART
Fiber Parameters		
Typ. Fiber Type		SMF28
Typ. Fiber Jumper Type		900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Case Temperature	℃	- 20 to + 65
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) ×W(mm) × H(mm)	mm	130x100x18 or customization

L++ Variable Gain EDFA

Description

The L++ band EDFA is characterized by excellent optical properties and highreliability. Its flexible working mode and concise interface supports the super L-band amplification and supports gain adjustable.

Key Features

- Support to 120 signal channels
- High gain range and lower NF
- Fast transient control
- Support constant Gain/constant output Power/manual mode
- Customized

Applications

- DCI
- Long haul
- Ultra-high speed telecommunications system

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength Range	nm	1575~1627
Max Output Power	dBm	23
Gain Range	dB	15~25
Gain Flatness	dB	1.5
Max NF@25dB Gain	dB	9.5
PDG	dB	0.3
PMD	ps	0.5
Electrical Parameters		
Operating Current	A	< 7
Operating Voltage	V	5
Communication Interface		UART
Fiber Parameters		
Typ. Fiber Type		SMF28
Typ. Fiber Jumper Type		900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Case Temperature	℃	- 20 to + 55
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) ×W(mm) × H(mm)	mm	220x130x25 or customization

C+L Variable Gain EDFA

Description

The C+L band EDFA is characterized by excellent optical properties and highreliability. Its flexible working mode and concise interface supports the super C+L-band amplification and supports gain adjustable.

Key Features

- Support to 96+96 signal channels
- High gain range and lower NF
- Fast transient control
- Support constant Gain/constant output Power/manual mode
- Customized

Applications

- Backbone network
- MAN, OTN
- DCI

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength Range	nm	1528.77~1567.13 &1570.42 ~1611.35
C-band Max Output Power	dBm	23
L-band Max Output Power	dBm	23
Gain Range	dB	15~25
Gain Flatness	dB	1.5
Max NF@25dB Gain	dB	C Band 5.5dB / L band 6.5dB
PDG	dB	0.3
PMD	ps	0.5
Electrical Parameters		
Operating Current	A	＜8
Operating Voltage	V	5
Communication Interface		UART
Fiber Parameters		
Typ. Fiber Type		SMF28
Typ. Fiber Jumper Type		900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Case Temperature	℃	- 20 to + 55
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) ×W(mm) × H(mm)	mm	220x130x25 or customization

Single Channel Nano EDFA

Description

The Nano EDFA is built in an extremely small package with extremely low power consumption. It supports single-channel amplification and the maximum output power can reach 6 dBm.

Key Features

- Ultra Mini Size
- High gain and lower NF
- Support constant output Power/manual mode
- Customized

Applications

- High-speed transmission systems.
- DCI

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength Range	nm	1528 ~ 1568
Max Output Power	dBm	6
Input Power Range	dBm	-20 ~ 0
Max NF@26dB Gain	dB	6.5
PDG	dB	0.3
PMD	ps	0.5
Electrical Parameters		
Operating Current	A	0.2
Operating Voltage	V	5
Communication Interface		UART
Fiber Parameters		
Typ. Fiber Type		SMF28
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Case Temperature	℃	- 20 to + 70
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) ×W(mm) × H(mm)	mm	40x24x6.5 or customization

2-Pump Raman Amplifier

Description

The 2-Pump Raman Amplifier is characterized by excellent optical properties and highreliability. Its flexible working mode and concise interface supports gain&tilt adjustable and transient control.

Key Features

- Support C, L Band
- Lower NF
- Excellent gain flatness
- Pump power and input signal monitoringmode
- Support constant Gain/constant output Power/manual mode

Applications

- Long haul
- High speed transmission system

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength Range	nm	C, L Band
Input Power	dBm	-40~0
On-Off Gain range	dB	10~17
Gain Flatness	dB	2
Effective NF	dB	＜0
Fiber: SSMF/G.652,Leaf/G.655 etc	dB	0.3
PMD	ps	0.5
Electrical Parameters		
Operating Current	A	＜8
Operating Voltage	V	5
Communication Interface		UART
Fiber Parameters		
Typ. Fiber Type		SMF28
Typ. Fiber Jumper Type		900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Case Temperature	℃	- 20 to + 65
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) ×W(mm) × H(mm)	mm	220x130x20 or customization

4-Pump Raman Amplifier

Description

The4-Pump Raman Amplifier is characterized by excellent optical properties and highreliability. Its flexible working mode and concise interface supports gain&tilt adjustable and transient control.

Key Features

- Support C, L , or C+L Band
- Lower NF
- Excellent gain flatness,Tilt control
- Pump power and input signal monitoringmode
- Support constant Gain/constant output Power/manual mode

Applications

- Long haul
- High speed transmission system

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength Range	nm	Supper C-Band, Supper L- Band
Input Power	dBm	-40~0
On-Off Gain range	dB	10~20
Gain Flatness	dB	2
Effective NF	dB	＜0
Fiber: SSMF/G.652,Leaf/G.655 etc	dB	0.3
PMD	ps	0.5
Electrical Parameters		
Operating Current	A	＜12
Operating Voltage	V	5
Communication Interface		UART
Fiber Parameters		
Typ. Fiber Type		SMF28
Typ. Fiber Jumper Type		900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Case Temperature	℃	- 20 to + 65
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) ×W(mm) × H(mm)	mm	220x130x22 or customization

5W Variable Gain EDFA

Description

This product is a C band High Power Amplifier module which is used in low noise, long span or high-speed optical transmission system. The Amplifier is characterized by excellent optical properties and highreliability. Amplifier

Key Features

- Support to 96 signal channels
- Flat gain with low NF
- 5W Optical Output Power
- Support constant Gain/constant output Power/manual mode
- Customized

Applications

- DWDM and Long Haul Application
- Spatial Laser Communications

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength Range	nm	1528.5 - 1567.5
Max Output Power	W	5
Gain Range	dB	35-43
Gain Flatness@25℃	dB	1.8
Max NF@43dB Gain	dB	5.5
PDG	dB	0.3
PMD	ps	0.5
Electrical Parameters		
Operating Current	A	＜12
Operating Voltage	V	5
Communication Interface		UART
Fiber Parameters		
Typ. Fiber Type		SMF28
Typ. Fiber Jumper Type		Tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	E2000
Environment Requirement		
Operating Case Temperature	℃	- 5 to + 65
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) ×W(mm) × H(mm)	mm	220x170x38 or customization

10W Variable Gain EDFA

Description

This product is a C band High Power Amplifier module which is used in low noise, long span or high-speed optical transmission system. The Amplifier is characterized by excellent optical properties and highreliability. Amplifier

Key Features

- Support to 96 signal channels
- Flat gain with low NF
- 10W Optical Output Power
- Support constant Gain/constant output Power/manual mode
- Customized

Applications

- DWDM and Long Haul Application
- Spatial Laser Communications

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength Range	nm	1528.5 - 1567.5
Max Output Power	W	10
Gain Range	dB	35-43
Gain Flatness@25℃	dB	1.8
Max NF@43dB Gain	dB	5.5
PDG	dB	0.3
PMD	ps	0.5
Electrical Parameters		
Operating Current	A	＜12
Operating Voltage	V	5
Communication Interface		UART
Fiber Parameters		
Typ. Fiber Type		G655
Typ. Fiber Jumper Type		Tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	E2000
Environment Requirement		
Operating Case Temperature	℃	- 5 to + 65
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) ×W(mm) × H(mm)	mm	220x170x38 or customization

OTDR

Description

This OTDR is characterized by excellent optical properties and highreliability. Its flexible working mode and concise interface.

Key Features

- In house LD and APD
- Flexible in LD customized wavelength
- Dynamic range is up to 40dB
- Deadzone 5m
- Compliance with Telcordia GR-468-CORE

Applications

- Long haul
- Metro and DCI system

Specifications

Optical Parameter	Unit	Value
Wavelength Range	nm	1503/1625
Pulse Power	dBm	15
Pulse Width	NA	5ns~20us
Distance Range	km	200 max
Sampling Resolution	NA	0.05 m to 60 m
Distance Accuracy	m	±1 m ±3 × measurement distance × 10-5 ± marker resolution (excluding IOR uncertainty)
Loss Measurement Accuracy (Linearity)	ps	±0.05 dB/dB or ±0.1 dB (whichever is greater)
Electrical Parameters		
Operating Current	A	＜0.5
Operating Voltage	V	12
Communication Interface		Ethernet
Fiber Parameters		
Typ. Fiber Type		SMF28
Typ. Fiber Jumper Type		900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/UPC
Package Dimensions		
Module Package Dimension L(mm) ×W(mm) × H(mm)	mm	150×110×15 or customization
Environment Requirement		
Operating Case Temperature	℃	- 20 to + 65
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6

VOA Array

Description

The highly reliable 32-channel attenuator mainly realizes the attenuation processing and communication control of the 32 returned optical signals respectively Made.This module supports demultiplexing and multiplexing.

Specifications

Optical Parameter	Unit	Value
Wavelength Range	nm	C+L band
Insertion Loss	dB	1.5
Tolerable Optical Power	mW	300
Minimum Adjustable Resolution	dB	0.1
VOA Attenuation Range	dB	0~20
PD Detection Accuracy	dB	+/-0.3
Operating Mode		VOA,ACC,APC
Electrical Parameters		
Operating Current	A	customization
Operating Voltage	V	customization
Communication Interface		customization
Fiber Parameters		
Typ. Fiber Type		SMF1550 / bare fiber
Typ. Fiber Jumper Type		customization
Typ. Fiber Length	m	costomization
Fiber Connector	-	FC/APC or customization
Package Dimensions		
Module Package Dimension L(mm) ×W(mm) × H(mm)	mm	customization
Environment Requirement		
Operating Case Temperature	℃	- 20 to + 65
Storage Case Temperature	℃	- 40 to + 85
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6

Pump Combiner With Active Fiber

V1.0

PN:Y-2-D-38-D-H-1-T

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

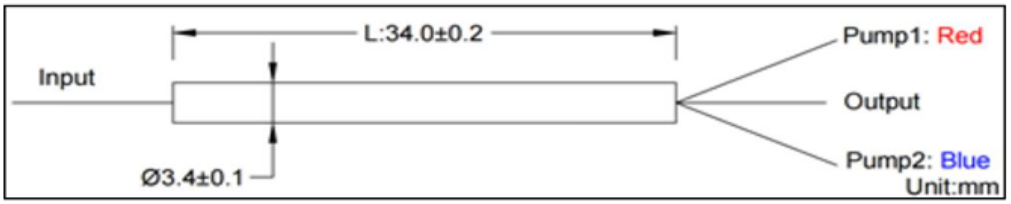
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	IXF-2CF-EY-O-12-130-L3
Fiber Type for Output	-	G654D
Typ. Pump Efficiency[1]	%	33
Signal Channel Fiber Length	m	3.9±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

PN:Y-2-G-30-H-H-1-T

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

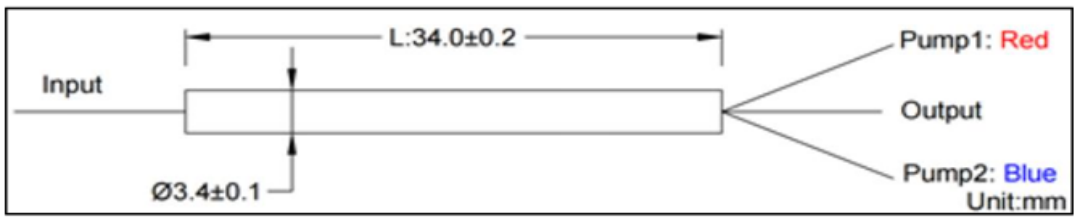
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	DCF-EY-10/128P-HT
Fiber Type for Output	-	HTBI 9/125-14/250+(150)_Y
Typ. Pump Efficiency[1]	%	32
Signal Channel Fiber Length	m	3±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-D-30-H-H-1-T

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

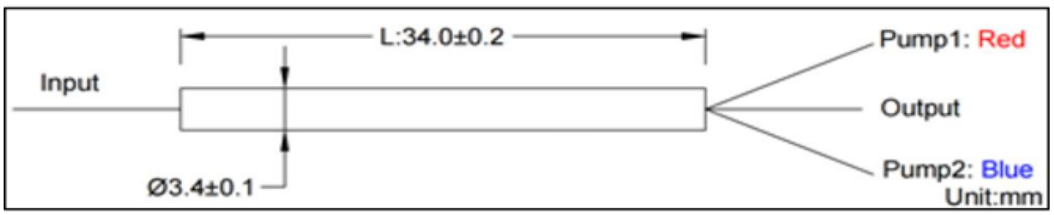
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	SM-EYDF-10P/125-XP
Fiber Type for Output	-	HTBI 9/125-14/250+(150)_Y
Typ. Pump Efficiency[1]	%	32
Signal Channel Fiber Length	m	3±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-1-C-30-H-H-1-T

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

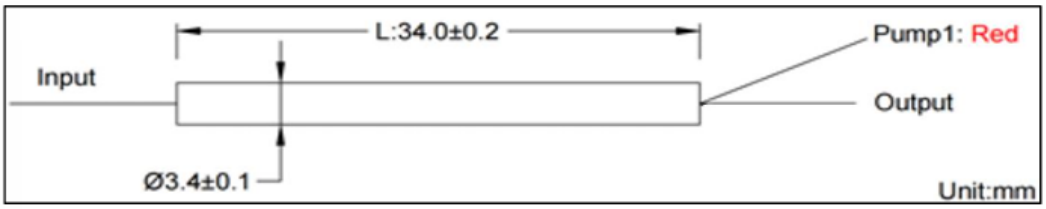
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(1+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	SM-EYDF-10P/125-XP
Fiber Type for Output	-	HTBI 9/125-14/250+(150)_Y
Typ. Pump Efficiency[1]	%	32
Signal Channel Fiber Length	m	3±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	℃	-40 to +110
Storage Temperature	℃	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-A-30-S-M-1-T

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

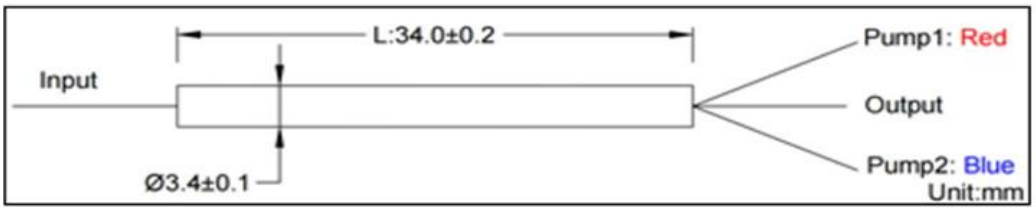
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	DCF-EY-6/128
Typ. Pump Efficiency[1]	%	17
Signal Channel Fiber Length	m	3±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-F-30-H-H-1-T-1

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

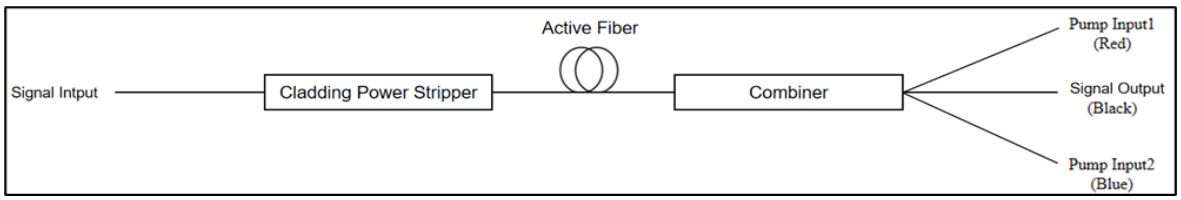
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	EYDF_DC SM-10-125H
Typ. Pump Efficiency[1]	%	33
Signal Channel Fiber Length	m	3.0±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-A-70-S-M-1-T-1

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

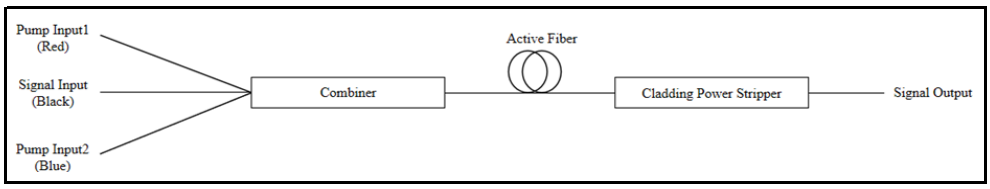
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	DCF-EY-6/128
Typ. Pump Efficiency[1]	%	17
Signal Channel Fiber Length	m	7.0±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-A-90-S-M-1-T-1

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

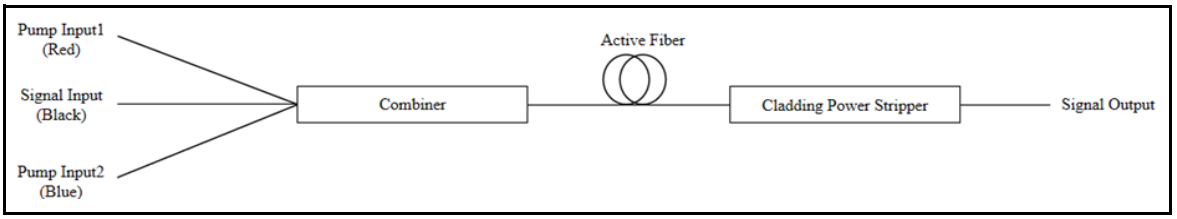
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	DCF-EY-6/128
Typ. Pump Efficiency[1]	%	17
Signal Channel Fiber Length	m	9.0±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-F-70-H-H-1-T-1

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

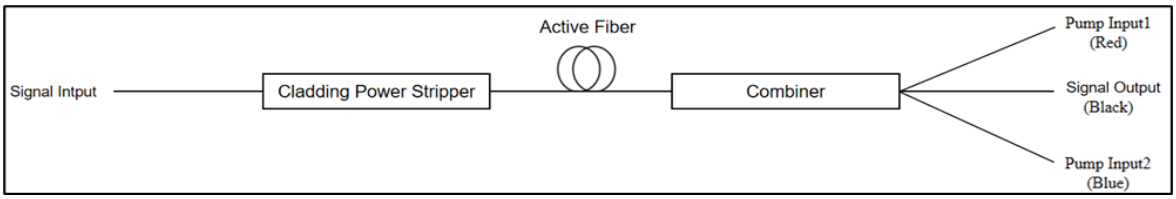
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	EYDF_DC SM-10-125H
Typ. Pump Efficiency[1]	%	33
Signal Channel Fiber Length	m	7.0±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-A-55-S-M-1-T-1

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

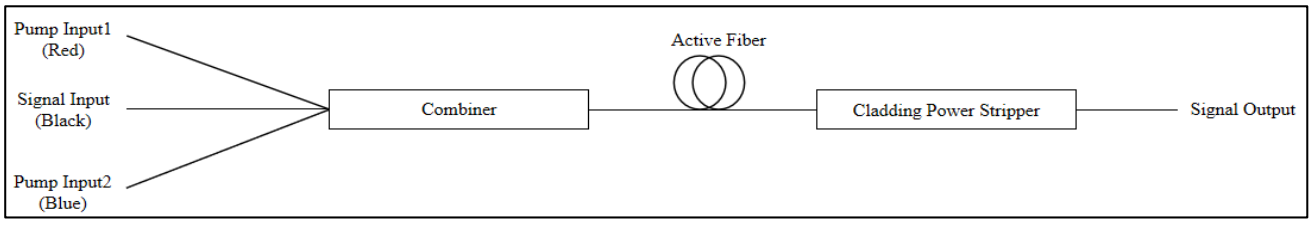
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	DCF-EY-6/128
Typ. Pump Efficiency[1]	%	17
Signal Channel Fiber Length	m	5.5±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-A-75-S-M-1-T-1

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

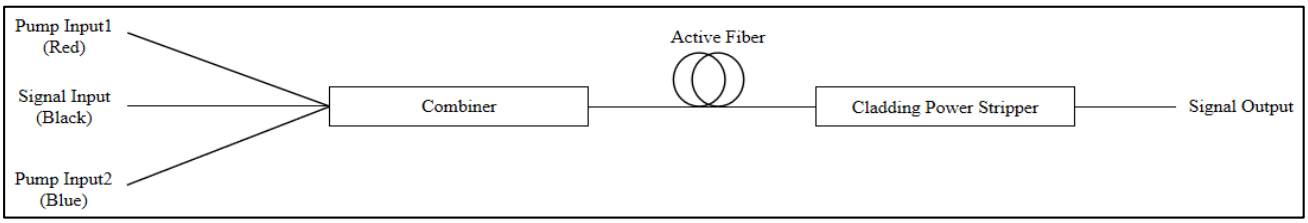
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	DCF-EY-6/128
Typ. Pump Efficiency[1]	%	17
Signal Channel Fiber Length	m	7.5±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-A-65-S-M-1-T-1

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

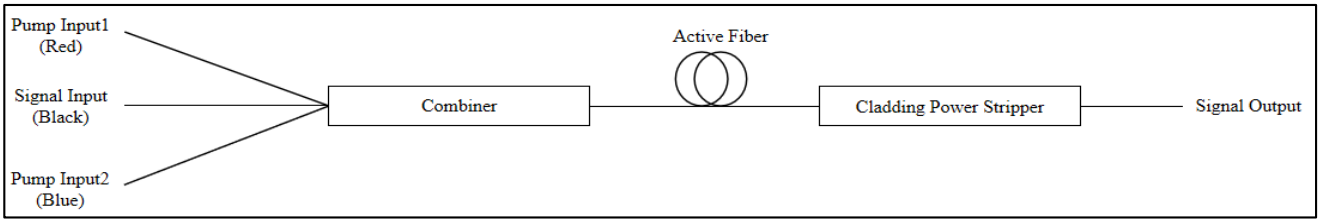
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	DCF-EY-6/128
Typ. Pump Efficiency[1]	%	17
Signal Channel Fiber Length	m	6.5±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:Y-2-F-45-H-H-1-T-1

Description

Pump combiner + signal transfers.

Key Features

- High power transfer efficiency
- Wavelength insensitive
- Particular pulling and package technique
- Custom configurations available

Applications

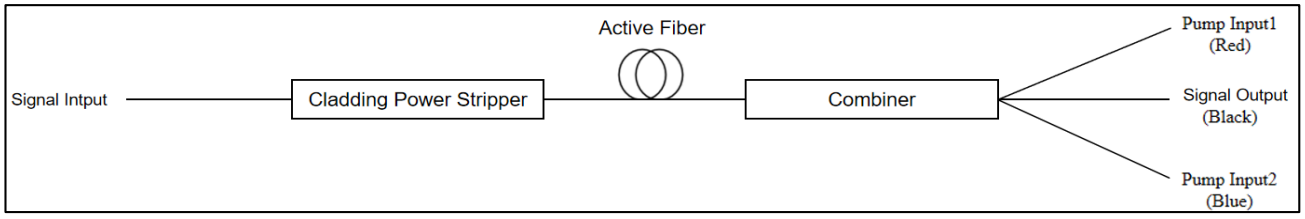
- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Product Type		(2+1)×1
Pump Wavelength Range	nm	900-1000
Signal Wavelength Range	nm	1550
Fiber Type for Input (Pump Channel)	-	105/125 (0.22 NA)
Fiber Type for Input (Signal Channel)	-	HTBI 9/125-14/250+(150)_Y
Fiber Type for Output	-	EYDF_DC SM-10-125H
Typ. Pump Efficiency[1]	%	33
Signal Channel Fiber Length	m	4.5±0.2
Max. Input Pump Power	W	10
Package Dimensions	mm	34（L）×3.4（Ø）
Operating Temperature	°C	-40 to +110
Storage Temperature	°C	-40 to +125
Humidity	%	5-95
RoHS	-	Satisfy with RoHS 6

[1]Test condition : λsignal=1550±3nm,Input power=100 mW;λpump=940±10nm,Pump Power=4 W

Package Dimensions



Pump Combiner With Active Fiber

V1.0

PN:C-1-1550S-1M

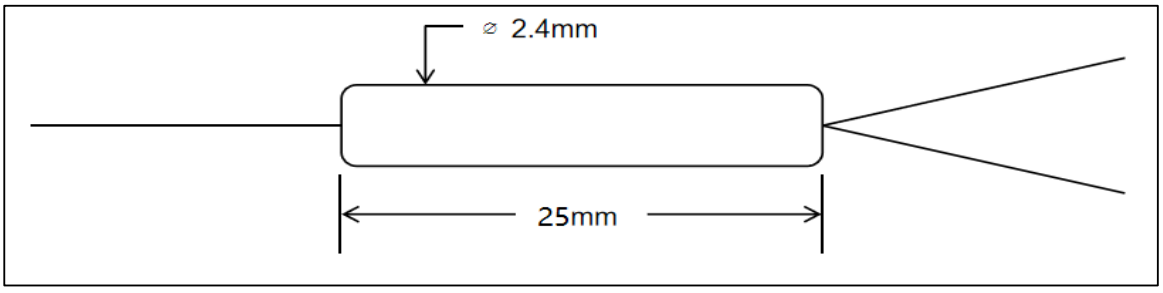
Description

The Singlemode Coupler offers very low insertion loss, low polarization dependence and excellent enviromental stability. Accurate coupling ratio from 50/50 to 1/99 are available with very good uniformity in a wide wavelength range. These components find extensive applications to perform power splitting and mornitoring fuctions in all kinds of optical communication systems.

Specifications

Parameter	Unit	Value
Center Wavelength (λc)	nm	1550
Operating Wavelength	nm	λc ± 15
Coupling Ratio	%	50/50
Max. Insertion Loss	dB	3.3
Max. PDL	dB	0.2
Max. Uniformity	dB	1.0
Max. Excess Loss	dB	0.15
Thermal Stability	dB/℃	≤ 0.005
Min. Return Loss	dB	55
Min. Directivity	dB	55
Max. Average Optical Power	W	3
Max.Peak Power for ns Pulse	KW	1
Fiber Type	-	SMF-28 Fiber
Operating Temperature	℃	- 40 to +110
Storage Temperature	℃	- 40 to +125

Package Dimensions



980nm Fused Optical Coupler

V1.0

PN:C-1-9850N-1-M

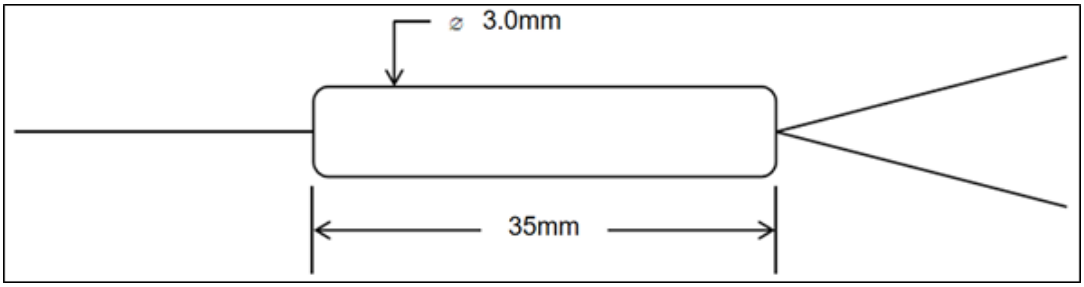
Description

The Singlemode Coupler offers very low insertion loss, low polarization dependence and excellent enviromental stability. Accurate coupling ratio from 50/50 to 1/99 are available with very good uniformity in a wide wavelength range. These components find extensive applications to perform power splitting and mornitoring fuctions in all kinds of optical communication systems.

Specifications

Parameter	Unit	Value
Center Wavelength (λc)	nm	980
Operating Wavelength	nm	λc ± 15
Coupling Ratio	%	50/50
Max. Insertion Loss	dB	3.5
Max. PDL	dB	0.2
Max. Uniformity	dB	1.0
Max. Excess Loss	dB	0.15
Thermal Stability	dB/℃	≤ 0.005
Min. Return Loss	dB	50
Min. Directivity	dB	55
Max. Average Optical Power	W	3
Max.Peak Power for ns Pulse	KW	1
Fiber Type	-	980-16
Operating Temperature	℃	- 40 to +85
Storage Temperature	℃	- 40 to +85

Package Dimensions



Pump Laser

V1.0

Description

10W 940nm pump laser is mainly used to provide pump energy, rare-earth element-doped fiber in the role of the pump light to achieve the particle beam inversion, the signal light to amplify the signal power amplification role.

Key Features

- 10 W Output Power
- 105 μm Aperture
- 0.22 NA

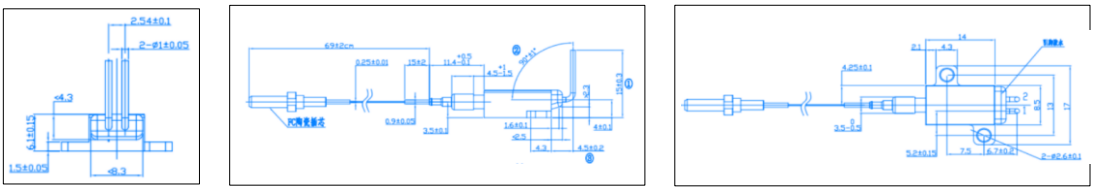
Applications

- ADAS
- Mapping
- Range-Detecting
- 3D Scanning
- Fiber Sensor

Specifications

Optical Parameter	**Unit**	**Value**
Center Wavelength, @5A	nm	936±5
Output Power, @5A 25 ℃	W	≥ 3.9
Output Power, @5A 105 ℃	W	≥ 2.8
Output Power, @12A 25 ℃	W	≥ 9.5
Spectral Width (FWHW)	nm	＜6
Electrical Parameters		
Typ. Conversion Efficiency, @5A 25 ℃	%	56
Slope Efficiency	W/A	0.95
Threshold Current	A	≤ 0.8
Operating Current	A	12
Operating Voltage	V	1.6
Fiber Parameters		
Typ. Fiber Core Diameter	μm	105
Typ. Fiber Clad Diameter	μm	125
Typ. Fiber Cladding	μm	250
Typ. Numerical Aperture	NA	0.22
Typ. Fiber Length	mm	680~720
Typ. Loose Tubing Diameter	mm	0.9
Loose Tubing Length	mm	13 - 17
Fiber Connector	-	FC Ceramic Ferrule
Environment Requirement		
Operating Case Temperature（Imax 6A@115℃）	℃	- 40 + 115
Storage Case Temperature	℃	- 40 + 115
Humidity	%	5 - 90
RoHS	-	Satisfy with RoHS 6

Package Dimensions



Pin	**Function**
1	Laser (+)
2	Laser (-)

WDM_980&1550

V1.0

PN:F-1-9100N-1M

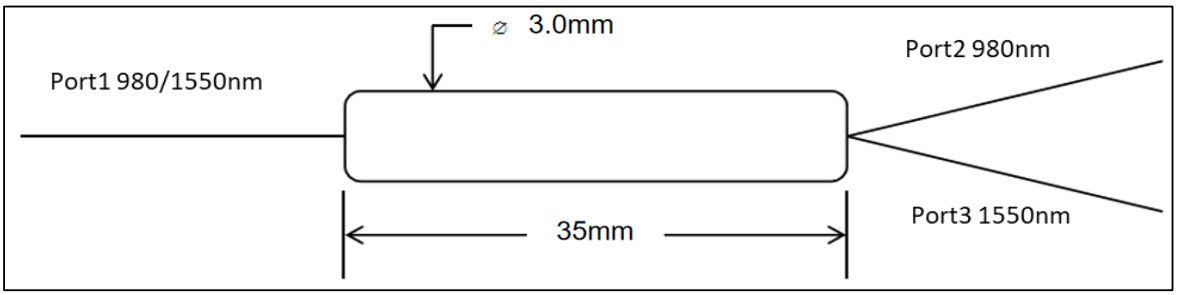
Description

980&1550 single-mode fused biconical taper WDM, manufactured via fused biconical taper technology, can couple or split two different single-mode signals with low insertion loss. It is especially suitable for combining pump and signal wavelengths in fiber lasers, amplifiers and long-haul communication systems.

Specifications

Parameter	Unit	Value
Operating Wavelength	nm	980/1550
Max. Insertion Loss(P1-P2)	dB	0.15
Max. Insertion Loss(P1-P3)	dB	0.15
Min. Isolation(P1-P2)	dB	20
Min. Isolation(P1-P3)	dB	20
Max. PDL	dB	0.2
Min. Return Loss	dB	50
Min. Directivity	dB	55
Max. Average Optical Power	W	3
Max.Peak Power for ns Pulse	KW	1
Fiber Type	-	980-16
Operating Temperature	℃	- 40 to +85
Storage Temperature	℃	- 40 to +85

Package Dimensions



Hybrid

V1.0

Description

The hybrid contains an isolator and splitter, which serves to allow the signal light to travel in the positive direction and to separate a portion of the signal light for detection, as well as to isolate the light that is reflected back from the optical path so that it does not affect the output light.

Key Features

- High power transfer efficiency
- Custom configurations available

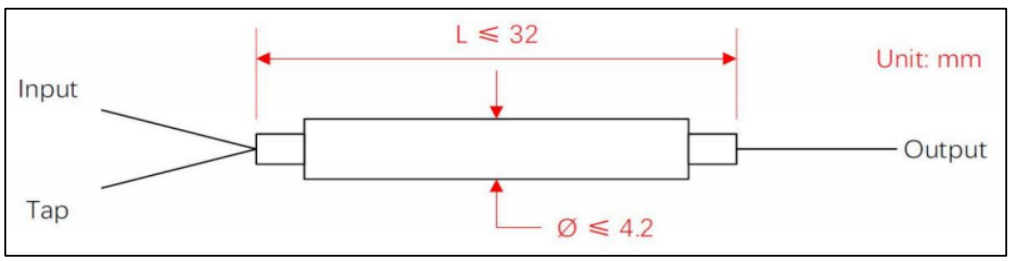
Applications

- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Wavelength Center	nm	1550
Tap Ratio	%	0.1
IL1(Input→Output)	dB	＜0.6
IL2(Input→Tap)	dB	29~32
ISO(Output→Input)	dB	＞30
TDL	dB	＜0.4
PDL	dB	＜0.2
RL	dB	＞50
Power Handling (Average)	W	≤5
Package Dimensions	mm	32（L）×4.2（Ø）
Operating Temperature	℃	-40 to +110
Storage Temperature	℃	-40 to +125
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6

Package Dimensions



Isolator

V1.0

Description

The main function of the isolator is to allow the signal light to be transmitted in the positive direction, and to isolate the light reflected back from the optical path to avoid the impact on the signal light.

Key Features

- High power transfer efficiency
- Custom configurations available

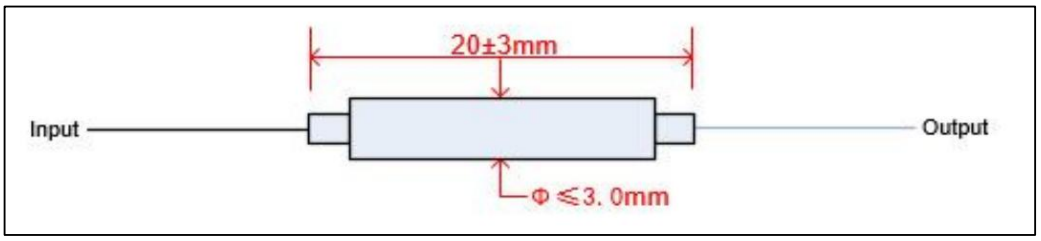
Applications

- High power fiber laser
- High power EDFA
- CATV amplifier

Specifications

Parameter	Unit	Value
Wavelength Center	nm	1550
IL(Input→Output)	dB	＜0.6
ISO(Output→Input)	dB	＞30
TDL	dB	＜0.4
PDL	dB	＜0.2
RL	dB	＞50
Power Handling (Average)	W	≤5
Package Dimensions	mm	20（L）×3.0（Ø）
Operating Temperature	℃	-40 to +110
Storage Temperature	℃	-40 to +125
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6

Package Dimensions



Low Peak Power lidar LiDAR Source Series——MP63

V1.0

Description

MP63 series is a 1550nm pulsed fiber laser that can achieve 1kW peak power with 2~4ns pulse width. The main features are compact size, wide operating temperature range and low power consumption.

Key Features

- 1550nm eye safety
- High peak power
- High OSNR
- Low power consumption
- High reliability

Applications

- Vehicle-mounted LiDAR
- Remote sensing mapping LiDAR
- Laser ranging system
- 3D scanning system
- Optical fiber sensing system

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength	nm	1547~1553
Average Power	W	1
Pulse Width	ns	2~4
Repetition Rate	kHz	200~2000
OSNR	dB	> 35
Electrical Parameters		
Power Voltage	V	12
Power Consumption	W	10
Communication Interface	-	UART
Fiber Parameters		
Typ. Fiber Type	-	SMF28
Typ. Fiber Jumper Type	-	900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Temperature	℃	-40 to +105
Storage Temperature	℃	-40 to +125
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) × W(mm) × H(mm)	mm	80 × 45 × 15

High Peak Power lidar LiDAR Source Series——MP64

V1.0

Description

MP64 series is a 1550nm pulsed fiber laser that can achieve 6kW peak power with 2ns pulse width. The main features are compact size, wide operating temperature range and low power consumption.

Key Features

- 1550nm eye safety
- High peak power
- High OSNR
- Low power consumption
- High reliability

Applications

- Vehicle-mounted LiDAR
- Remote sensing mapping LiDAR
- Laser ranging system
- 3D scanning system
- Optical fiber sensing system

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength	nm	1547~1553
Average Power	W	1.5
Pulse Width	ns	2
Repetition Rate	kHz	50~5000
Electrical Parameters		
Power Voltage	V	12
Power Consumption	W	15
Communication Interface	-	UART
Fiber Parameters		
Typ. Fiber Type	-	G.654.D
Typ. Fiber Jumper Type	-	900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Temperature	℃	-40 to +105
Storage Temperature	℃	-40 to +125
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) × W(mm) × H(mm)	mm	90 × 70 × 15

Pulsed LiDAR EYDFA——MP66

V1.0

Description

MP66 series is a 1550nm pulsed fiber laser that can achieve 1kW peak power with 2~4ns pulse width. The main features are compact size, wide operating temperature range and low power consumption.

Key Features

- 1550nm eye safety
- High peak power
- High OSNR
- Low power consumption
- High reliability

Applications

- Vehicle-mounted LiDAR
- Remote sensing mapping LiDAR
- Laser ranging system
- 3D scanning system
- Optical fiber sensing system

Specifications

Optical Parameter	**Unit**	**Value**
Wavelength	nm	1545~1555
Average Power	W	＞1
Pulse Width	ns	2~3.5
Repetition Rate	kHz	400~1000
OSNR	dB	＞25
Electrical Parameters		
Power Voltage	V	12
Power Consumption	W	10
Communication Interface	-	UART
Fiber Parameters		
Typ. Fiber Type	-	SMF28
Typ. Fiber Jumper Type	-	900um loose tube or tight buffer
Typ. Fiber Length	m	1
Fiber Connector	-	LC/APC
Environment Requirement		
Operating Temperature	℃	-40 to +105
Storage Temperature	℃	-40 to +125
Humidity	%	5 - 95
RoHS	-	Satisfy with RoHS 6
Dimensions		
Module Dimension L(mm) × W(mm) × H(mm)	mm	70 × 49.5 × 15