



High power passive optical components

780NM OPTICAL ISOLATOR (TGG BASED, UP TO 20W)	2
850NM OPTICAL ISOLATOR (TGG BASED, UP TO 20W)	3
980NM HIGH POWER CIRCULATOR (TGG BASED)	4
980NM OPTICAL ISOLATOR (TGG BASED, UP TO 20W)	5
980NM PM OPTICAL CIRCULATOR (TGG-BASED)	6
1030NM HIGH POWER CIRCULATOR (TGG BASED)	7
1030NM OPTICAL ISOLATOR (TGG BASED, UP TO 20W).....	8
1030NM PM OPTICAL CIRCULATOR (TGG-BASED)	9
1064NM HIGH POWER CIRCULATOR (TGG BASED)	10
1064NM OPTICAL ISOLATOR(FARADAY BASED, UP TO 2W)	11
1064NM OPTICAL ISOLATOR (TGG BASED, UP TO 20W).....	12
1064NM PM OPTICAL CIRCULATOR (TGG-BASED)	13
1064NM PM OPTICAL ISOLATOR (FARADAY BASED, UP TO 2W)	14
2000NM OPTICAL ISOLATOR (2MM FIBER LASER,UP TO 20W)	15
2000NM PM OPTICAL ISOLATOR (2MM FIBER LASER)	16
ISOLATOR & WDM HYBRID (TGG BASED, UP TO 20W,06/98).....	17
HIGH POWER ISOLATOR+WDM HYBRID (T1064 OR 1030/R980NM).....	18
MULTI -MODE PUMP LASER PROTECTOR (UP TO 30W)	19
1064NM COLLIMATED BEAM OUTPUT ISOLATOR(UP TO 20W).....	20
PUMP LASER PROTECTOR(UP TO 20W)	21
PM PUMP LASER PROTECTOR(UP TO 20W).....	22
PM TAP & ISOLATOR & WDM HYBRID (UP TO 10W, 06/98).....	23
PM TAP & ISOLATOR & WDM HYBRID (UP TO 20W, 06/98).....	25
1064NM PM COLLIMATED BEAM OUTPUT ISOLATOR(UP TO 20W).....	27
PM ISOLATOR+WDM HYBRID (TGG BASED, UP TO 10W,06/98)	28
PM ISOLATOR+WDM HYBRID (TGG BASED, UP TO 20W,06/98)	29
1310NM/1550NM PM OPTICAL ISOLATOR (UP TO 20W)	30
TAP & ISOLATOR & WDM HYBRID (UP TO 10W).....	31

780nm Optical Isolator (TGG Based, up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

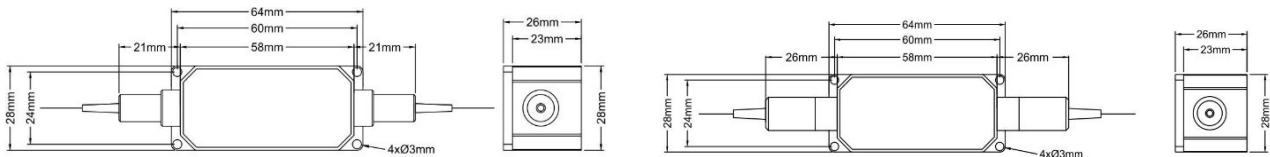
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameters	Unit	Value
Center Wavelength	nm	780
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23°C	dB	25
Min. Isolation at 23°C	dB	20
Typ. Insertion Loss at 23°C	dB	0.8
Max. Insertion Loss at 23°C	dB	1.0
Max. Polarization Dependent Loss at 23°C, only for PI	dB	0.15
Min. Return Loss(Input /Output)	dB	45
Max. Average Optical Power	W	20 or Specified
Max. Peak Power for ns Pulse	kW	10 or Specified
Max. Tensile Load	N	5
Package Dimension	mm	58x28x26
Operating Temperature	°C	+10~+50
Storage Temperature	°C	0~+60

Package Dimensions



Max. Power:10W

Max. Power:20W

Ordering Information

PIIS-A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm, 850=850nm, 780=780nm
B	-Core Type:	S=Single-Core
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=58x28x26mm, S=Specified
E	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
I	-Peak Power:	10=10kW, 20=20kW

850nm Optical Isolator (TGG Based, up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

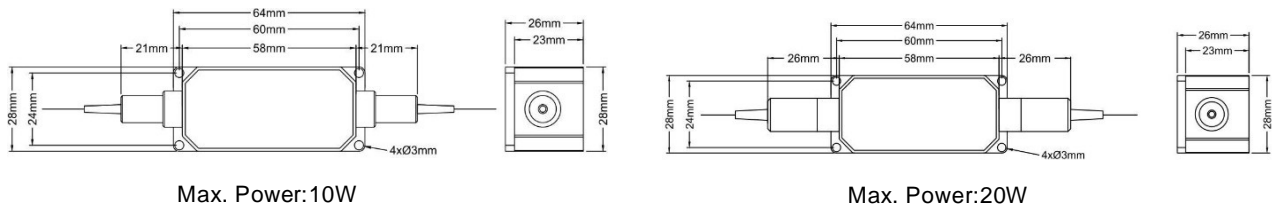
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameters	Unit	Value
Center Wavelength	nm	850
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23℃	dB	30
Min. Isolation at 23℃	dB	25
Typ. Insertion Loss at 23℃	dB	0.8
Max. Insertion Loss at 23℃	dB	1.0
Max. Polarization Dependent Loss at 23℃, only for PI	dB	0.15
Min. Return Loss(Input /Output)	dB	45
Max. Average Optical Power	W	20 or Specified
Max. Peak Power for ns Pulse	kW	10 or Specified
Max. Tensile Load	N	5
Package Dimension	mm	58x28x26
Operating Temperature	℃	+10~+50
Storage Temperature	℃	0~+60

Package Dimensions



Max. Power:10W

Max. Power:20W

Ordering Information

PIIS- A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm, 850=850nm, 780=780nm
B	-Core Type:	S=Single-Core
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=58x28x26mm, S=Specified
E	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
I	-Peak Power:	10=10kW, 20=20kW

980nm High Power Circulator (TGG Based)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High Stability & Reliability

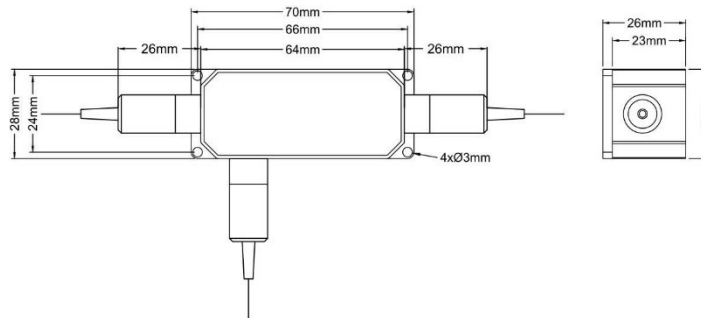
Applications

Fiber Amplifier
 Testing Instrument
 Fiber Sensor
 Medical Equipment

Specifications

Parameters	Unit	Value
Center Wavelength	nm	980
Operating Wavelength Range	nm	±5
Typ. Peak Isolation	dB	25
Max. Isolation at 23°C	dB	22
Typ. Insertion Loss at 23°C	dB	1.3
Max. Insertion Loss at 23°C	dB	1.5
Max. Polarization Dependent Loss at 23°C, only for PI	dB	0.15
Min. Return Loss(Input/ Output)	dB	45
Min. Cross Talk	dB	45
Max. Average Optical Power	W	20
Max. Peak Power for ns Pulse	kW	10
Max. Tensile Load	N	5
Package Dimension	mm	64x28x26
Operating Temperature	°C	+10~+50
Storage Temperature	°C	0~+60

Package Dimensions



Ordering Information

PICIR- A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm
B	-Port Type:	3=3-Port
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=64x28x26mm, S=Specified
E	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
I	-Peak Power:	10=10kW, 20=20kW

980nm Optical Isolator (TGG Based, up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

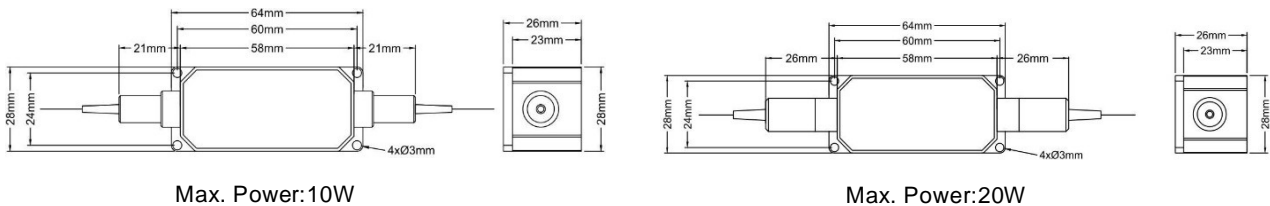
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameters	Unit	Value
Center Wavelength	nm	980
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23℃	dB	30
Min. Isolation at 23℃	dB	25
Typ. Insertion Loss at 23℃	dB	0.8
Max. Insertion Loss at 23℃	dB	1.0
Max. Polarization Dependent Loss at 23℃, only for PI	dB	0.15
Min. Return Loss(Input /Output)	dB	45
Max. Average Optical Power	W	20 or Specified
Max. Peak Power for ns Pulse	kW	10 or Specified
Max. Tensile Load	N	5
Package Dimension	mm	58x28x26
Operating Temperature	℃	+10~+50
Storage Temperature	℃	0~+60

Package Dimensions



Max. Power:10W

Max. Power:20W

Ordering Information

PIIS- A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm, 850=850nm, 780=780nm
B	-Core Type:	S=Single-Core
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=58x28x26mm, S=Specified
E	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
I	-Peak Power:	10=10kW, 20=20kW

980nm PM Optical Circulator (TGG-Based)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High Stability & Reliability

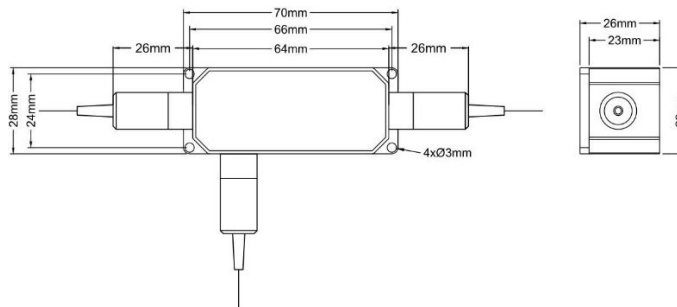
Applications

Fiber Amplifier
 Testing Instrument
 Fiber Sensor
 Medical Equipment

Specifications

Parameters	Unit	Value
Center Wavelength	nm	980
Operating Wavelength Range	nm	±5
Typ. Peak Isolation	dB	25
Max. Isolation at 23°C	dB	22
Typ. Insertion Loss at 23°C	dB	1.3
Max. Insertion Loss at 23°C	dB	1.5
Min. Extinction Ratio at 23°C, only for PM	dB	20
Min. Return Loss(Input/ Output)	dB	45
Min. Cross Talk	dB	45
Max. Average Optical Power	W	20
Max. Peak Power for ns Pulse	kW	10
Max. Tensile Load	N	5
Package Dimension	mm	64x28x26
Operating Temperature	°C	+10~+50
Storage Temperature	°C	0~+60

Package Dimensions



Ordering Information

PM CIR- A/B/C/D/E/F/G/H/I/J

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm
B	-Port Type:	3=3-Port
C	-Axis Alignment for PM:	F=Slow axis working, Fast axis blocked, B=Both of axis working, N=No axis
D	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
E	-Package Dimension:	0=64x28x26mm, S=Specified
F	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
G	-Fiber Length:	0=0.8m, 1=1m
H	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
I	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
J	-Peak Power:	10=10kW, 20=20kW

1030nm High Power Circulator (TGG Based)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High Stability & Reliability

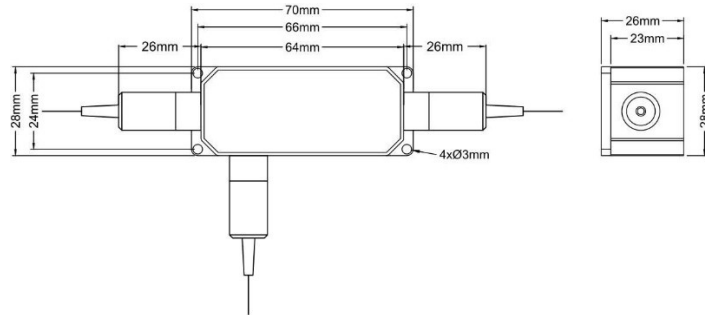
Applications

Fiber Amplifier
 Testing Instrument
 Fiber Sensor
 Medical Equipment

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1030
Operating Wavelength Range	nm	±5
Typ. Peak Isolation	dB	25
Max. Isolation at 23°C	dB	22
Typ. Insertion Loss at 23°C	dB	1.3
Max. Insertion Loss at 23°C	dB	1.5
Max. Polarization Dependent Loss at 23°C, only for PI	dB	0.15
Min. Return Loss(Input/ Output)	dB	45
Min. Cross Talk	dB	45
Max. Average Optical Power	W	20
Max. Peak Power for ns Pulse	kW	10
Max. Tensile Load	N	5
Package Dimension	mm	64x28x26
Operating Temperature	°C	+10~+50
Storage Temperature	°C	0~+60

Package Dimensions



Ordering Information

PICIR- A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm
B	-Port Type:	3=3-Port
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=64x28x26mm, S=Specified
E	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
I	-Peak Power:	10=10kW, 20=20kW

1030nm Optical Isolator (TGG Based, up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

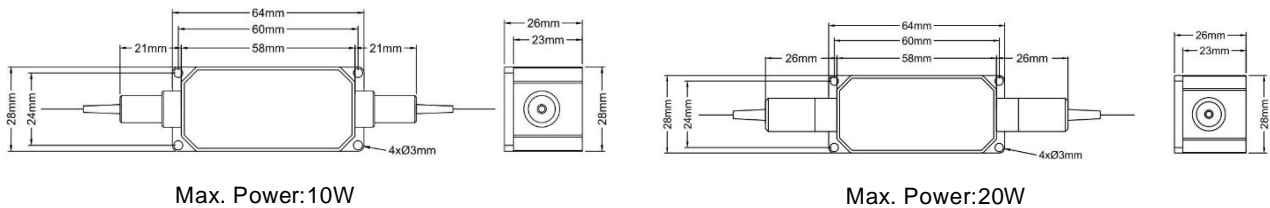
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1030
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23℃	dB	30
Min. Isolation at 23℃	dB	25
Typ. Insertion Loss at 23℃	dB	0.8
Max. Insertion Loss at 23℃	dB	1.0
Max. Polarization Dependent Loss at 23℃, only for PI	dB	0.15
Min. Return Loss(Input /Output)	dB	45
Max. Average Optical Power	W	20 or Specified
Max. Peak Power for ns Pulse	kW	10 or Specified
Max. Tensile Load	N	5
Package Dimension	mm	58x28x26
Operating Temperature	℃	+10~+50
Storage Temperature	℃	0~+60

Package Dimensions



Max. Power:10W

Max. Power:20W

Ordering Information

PIIS-A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm
B	-Core Type:	S=Single-Core
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=58x28x26mm, S=Specified
E	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
I	-Peak Power:	10=10kW, 20=20kW

1030nm PM Optical Circulator (TGG-Based)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High Stability & Reliability

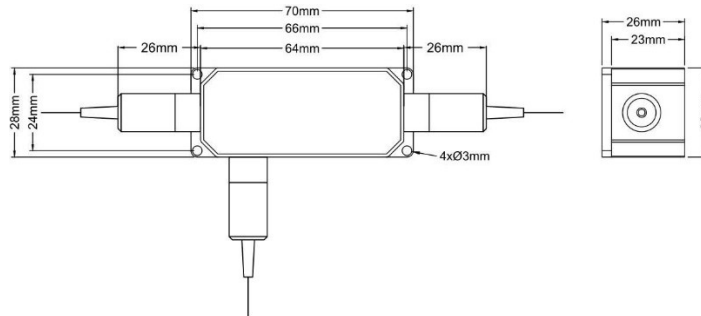
Applications

Fiber Amplifier
 Testing Instrument
 Fiber Sensor
 Medical Equipment

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1030
Operating Wavelength Range	nm	±5
Typ. Peak Isolation	dB	25
Max. Isolation at 23°C	dB	22
Typ. Insertion Loss at 23°C	dB	1.3
Max. Insertion Loss at 23°C	dB	1.5
Min. Extinction Ratio at 23°C, only for PM	dB	20
Min. Return Loss(Input/ Output)	dB	45
Min. Cross Talk	dB	45
Max. Average Optical Power	W	20
Max. Peak Power for ns Pulse	kW	10
Max. Tensile Load	N	5
Package Dimension	mm	64x28x26
Operating Temperature	°C	+10~+50
Storage Temperature	°C	0~+60

Package Dimensions



Ordering Information

PM CIR- A/B/C/D/E/F/G/H/I/J

A- Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm
B- Port Type:	3=3-Port
C- Axis Alignment for PM:	F=Slow axis working, Fast axis blocked, B=Both of axis working, N=No axis
D- Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
E- Package Dimension:	0=64x28x26mm, S=Specified
F- Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
G- Fiber Length:	0=0.8m, 1=1m
H- Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
I- Average Power:	00=500mW, 01=1W, 02=2W,, 05=5W, 10=10W
J- Peak Power:	10=10kW, 20=20kW

1064nm High Power Circulator (TGG Based)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High Stability & Reliability

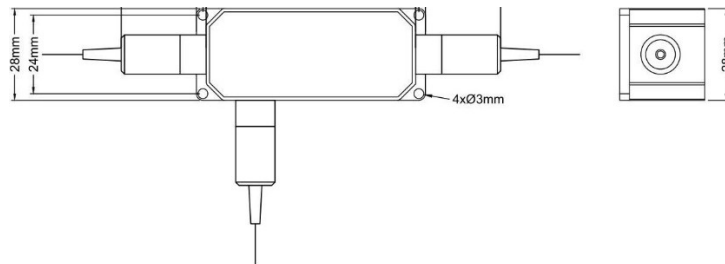
Applications

Fiber Amplifier
 Testing Instrument
 Fiber Sensor
 Medical Equipment

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1064
Operating Wavelength Range	nm	±5
Typ. Peak Isolation	dB	25
Max. Isolation at 23℃	dB	22
Typ. Insertion Loss at 23℃	dB	1.3
Max. Insertion Loss at 23℃	dB	1.5
Max. Polarization Dependent Loss at 23℃, only for PI	dB	0.15
Min. Return Loss(Input/ Output)	dB	45
Min. Cross Talk	dB	45
Max. Average Optical Power	W	20
Max. Peak Power for ns Pulse	kW	10
Max. Tensile Load	N	5
Package Dimension	mm	64x28x26
Operating Temperature	℃	+10~+50
Storage Temperature	℃	0~+60

Package Dimensions



Ordering Information

PICIR- A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm
B	-Port Type:	3=3-Port
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=64x28x26mm, S=Specified
E	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
I	-Peak Power:	10=10kW, 20=20kW

1064nm Optical Isolator(Faraday Based, up to 2W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High Stability & Reliability

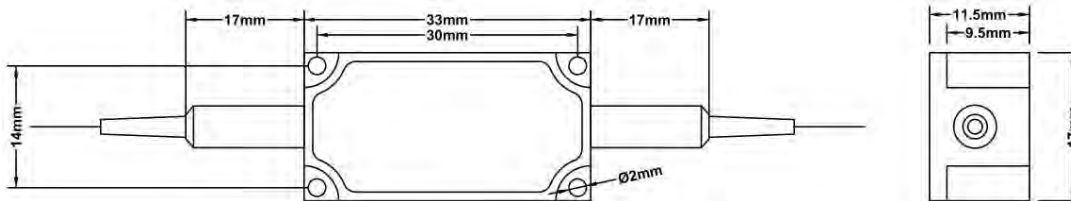
Applications

Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1064
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23°C	dB	35
Min. Isolation at 23°C	dB	28
Max. Insertion Loss at 23°C	dB	1.7
Max. Insertion Loss at 23°C and Input Power 300 mW	dB	2.0
Max. Insertion Loss at 23°C and Input Power 1 W	dB	2.5
Max. Insertion Loss at 23°C and Input Power 2 W	dB	3.0
Max.Polarization Dependent Loss at 23°C, only for PI	dB	0.2
Min. Return Loss(Input /Output)	dB	45
Max. Average Optical Power	W	2
Max. Peak Power for ns Pulse	kW	10
Max. Tensile Load	N	5
Operating Temperature	°C	+10 to +50
Storage Temperature	°C	0 to +60

Package Dimensions



Ordering Information

PIIS- A/B/C/D/E/F/G/H

A	-Center Wavelength:	1064=1064nm
B	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
C	-Package Dimension:	0=33x17x11.5mm, S=Specified
D	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
E	-Fiber Length:	0=0.8m, 1=1m
F	-Connector for In, Out:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
G	-Average Power:	01=1W, 02=2W
H	-Peak Power:	10=10kW, 20=20kW

1064nm Optical Isolator (TGG Based, up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

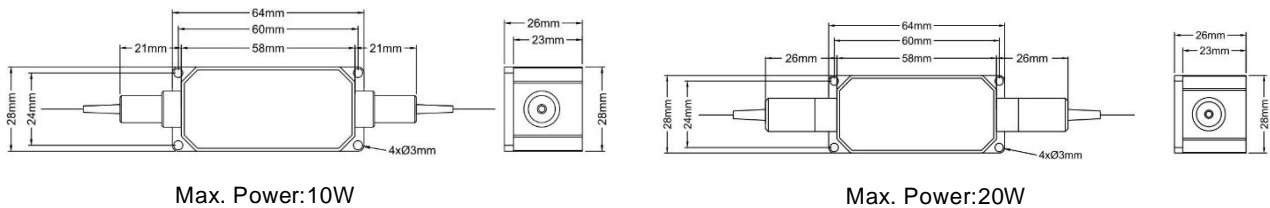
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1064
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23℃	dB	30
Min. Isolation at 23℃	dB	25
Typ. Insertion Loss at 23℃	dB	0.8
Max. Insertion Loss at 23℃	dB	1.0
Max. Polarization Dependent Loss at 23℃, only for PI	dB	0.15
Min. Return Loss(Input /Output)	dB	45
Max. Average Optical Power	W	20 or Specified
Max. Peak Power for ns Pulse	kW	10 or Specified
Max. Tensile Load	N	5
Package Dimension	mm	58x28x26
Operating Temperature	℃	+10~+50
Storage Temperature	℃	0~+60

Package Dimensions



Max. Power:10W

Max. Power:20W

Ordering Information

PIIS- A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm
B	-Core Type:	S=Single-Core
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=58x28x26mm, S=Specified
E	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	00=500mW, 01=1W, 02=2W,....., 05=5W, 10=10W
I	-Peak Power:	10=10kW, 20=20kW

1064nm PM Optical Circulator (TGG-Based)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High Stability & Reliability

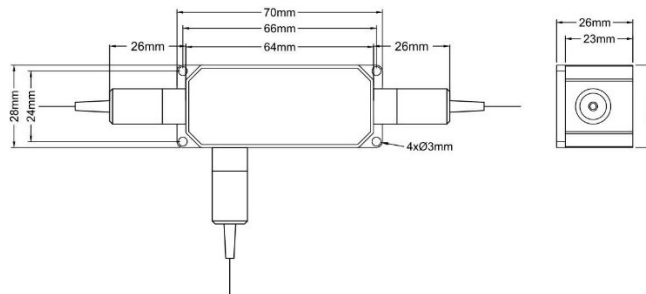
Applications

Fiber Amplifier
 Testing Instrument
 Fiber Sensor
 Medical Equipment

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1064
Operating Wavelength Range	nm	±5
Typ. Peak Isolation	dB	25
Max. Isolation at 23°C	dB	22
Typ. Insertion Loss at 23°C	dB	1.3
Max. Insertion Loss at 23°C	dB	1.5
Min. Extinction Ratio at 23°C, only for PM	dB	20
Min. Return Loss(Input/ Output)	dB	45
Min. Cross Talk	dB	45
Max. Average Optical Power	W	20
Max. Peak Power for ns Pulse	kW	10
Max. Tensile Load	N	5
Package Dimension	mm	64x28x26
Operating Temperature	°C	+10~+50
Storage Temperature	°C	0~+60

Package Dimensions



Ordering Information

PM CIR- A/B/C/D/E/F/G/H/I/J

Letter	Value	Parameter	Options
A	1064	-Center Wavelength:	1064=1064nm, 1030=1030nm, 980=980nm
B	2	-Port Type:	3=3-Port
C	3	-Axis Alignment for PM:	F=Slow axis working, Fast axis blocked, B=Both of axis working, N=No axis
D	444	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
E	6	-Package Dimension:	0=64x28x26mm, S=Specified
F	6	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
G	7	-Fiber Length:	0=0.8m, 1=1m
H	888	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
I	99	-Average Power:	00=500mW, 01=1W, 02=2W,, 05=5W, 10=10W
J	AA	-Peak Power:	10=10kW, 20=20kW

1064nm PM Optical Isolator (Faraday Based, up to 2W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High Stability & Reliability

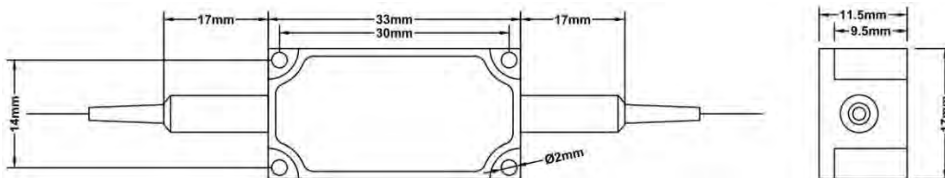
Applications

Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1064
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23°C	dB	35
Min. Isolation at 23°C	dB	28
Max. Insertion Loss at 23°C	dB	1.7
Max. Insertion Loss at 23°C and Input Power 300 mW	dB	2.0
Max. Insertion Loss at 23°C and Input Power 1 W	dB	2.5
Max. Insertion Loss at 23°C and Input Power 2 W	dB	3.0
Min. Extinction Ratio at 23°C at 23°C, only for PM	dB	20
Min. Return Loss(Input /Output)	dB	45
Max. Average Optical Power	W	2
Max. Peak Power for ns Pulse	kW	10
Max. Tensile Load	N	5
Operating Temperature	°C	+10 to +50
Storage Temperature	°C	0 to +60

Package Dimensions



Ordering Information

PMIS- A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1064=1064nm
B	-Axis Alignment for PM:	F=Slow axis working, Fast axis blocked, B=Both of axis working
C	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
D	-Package Dimension:	0=33x17x11.5mm, S=Specified
E	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector for In, Out:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
H	-Average Power:	01=1W, 02=2W
I	-Peak Power:	10=10kW, 20=20kW

2000nm Optical Isolator (2μm fiber laser, up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Extinction Ratio
 High Isolation
 High Stability & Reliability

Applications

Communication Systems
 Test Instrument
 Fiber Sensor
 Research

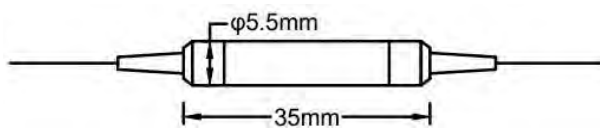
Specifications

Parameter	Unit	Value	
		Single	Dual
Stage	-	Single	Dual
Center Wavelength	nm	1950, 2000, 2050	
Operating Wavelength Range	nm	±20	
Min. Isolation at 23°C	dB	16	35
Max. Insertion Loss at 23°C	dB	1.2	1.5
Max. Polarization Dependent Loss at 23°C	dB	0.2	
Min. Return Loss (input/output)	dB	50/50	
Max. Optical Power(CW)	W	20	
Max. Tensile Load	N	5	
Fiber Type	-	Smf-28e, sm1950	
Operating Temperature	°C	-5~+70	
Storage Temperature	°C	-40~+85	

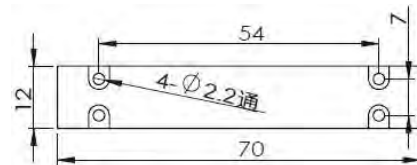
For device with connector, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB lower.

The default connector key is aligned to slow axis.

Package Dimensions



Max. Input Power:10W



Max. Input Power:20W

Ordering Information

PIIS- A/B/C/D/E/F/G/H/I

A	-Center Wavelength:	1950=1950nm, 2000=2000nm, 2050=2050nm.....
B	-Stage:	S=Single-core stage, D=Dual-core stage
C	-Fiber Type:	001=PM1550, 008=SMF-28E, 045=Nufern PM1950, 046=Nufern SM1950
D	-Package Dimension:	0=φ5.5x35mm, 1=70x12x8mm, S=Specified
E	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
F	-Fiber Length:	0=0.8m, 1=1m
G	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
H	-Average Power:	10=10W, 20=20W
I	-Peak Power:	10=10K, 20=20K

2000nm PM Optical Isolator (2μm fiber laser)

Features

Low Insertion Loss
 High Return Loss
 High Extinction Ratio
 High Isolation
 High Stability & Reliability

Applications

Communication Systems
 Test Instrument
 Fiber Sensor
 Research

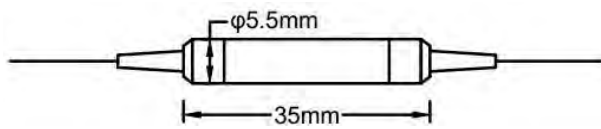
Specifications

Parameter	Unit	Value	
		Single	Dual
Stage	-	Single	Dual
Center Wavelength	nm	1950, 2000, 2050	
Operating Wavelength Range	nm	±20	
Min. Isolation at 23°C	dB	16	35
Max. Insertion Loss at 23°C	dB	1.2	1.5
Min. Extinction Ratio at 23°C	dB	20	
Min. Return Loss (input/output)	dB	50/50	
Max. Optical Power(CW)	W	5	
Max. Tensile Load	N	5	
Fiber Type	-	PM1950, PM1550	
Operating Temperature	°C	-5~+70	
Storage Temperature	°C	-40~+85	

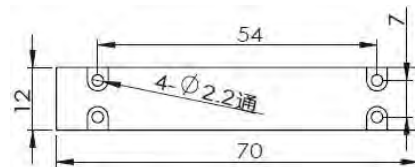
For device with connector, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB lower.

The default connector key is aligned to slow axis.

Package Dimensions



Max. Input Power:10W



Max.Input Power:20W

Ordering Information

PMIS- A/B/C/D/E/F/G/H/I/J

A	-Center Wavelength:	1950=1950nm, 2000=2000nm, 2050=2050nm.....
B	-Stage:	S=Single-core stage, D=Dual-core stage
C	-Axis Alignment:	F=Slow axis working, Fast axis blocked, B=Both of axis working
D	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
E	-Package Dimension:	0=φ5.5x35mm, 1=70x12x8mm, S=Specified
F	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
G	-Fiber Length:	0=0.8m, 1=1m
H	-Connector for In, Out:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
I	-Average Power:	10=10W, 20=20W
J	-Peak Power:	10=10K, 20=20K

Isolator & WDM Hybrid (TGG Based, up to 20W,06/98)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

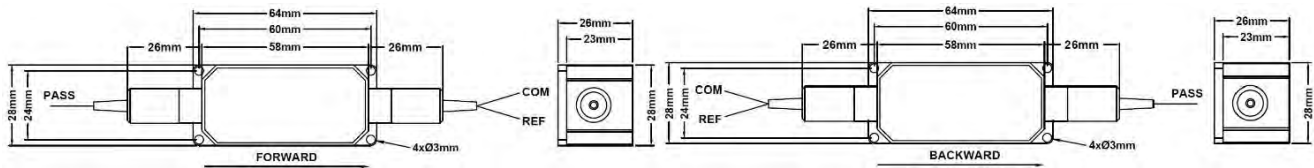
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameter	Unit	Value	
Signal Channel	Signal Wavelength Range	nm	1064±10 or 1030±10
	Max. Insertion Loss, at 23℃	dB	1.5
	Typ. Peak Signal Isolation, at 23℃	dB	30
	Min. Signal Isolation, at 23℃	dB	25
	Min. Isolation (Com to Pass @ Ref band Wavelength)	dB	30
Reflection Channel	Wavelength Range	nm	960~990
	Max. Insertion Loss	dB	0.8
	Min. Isolation (Com to Ref @ Pass band Wavelength)	dB	15
Max. Polarization Dependent Loss at 23℃, only for PI type		dB	0.15
Min. Return Loss		dB	50
Max. Optical Power(CW)		W	1,2,20
Max. Tensile Load		N	5
Operating Temperature		℃	5~+55
Storage Temperature		℃	-0~+75

Package Dimensions



Signal Route: Com to Pass
 Pump Route: Ref to Com

Signal Route: Pass to Com
 Pump Route: Ref to Com

Ordering Information

IWDM-A/B/C/D/E/F/G/H/I/J/K

A	-Center Wavelength:	1064=1064nm
B	-Core Stage:	S=Single-core stage
C	-Pump Type:	F=Forward, B=Backward
D	-Fiber Type for Signal:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
E	-Fiber Type for Ref	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
F	-Package Dimension:	0=58x28x26mm, S=Specified
G	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
H	-Fiber Length:	0=0.8m, 1=1m
I	-Connector for Com, Ref, Pass:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
J	-Average Power:	00=300mW, 01=1W, 02=2W,....., 05=5W....., 20=20W
K	-Peak Power	10=10kW, 20=20kW

High Power Isolator+WDM Hybrid (T1064 or 1030/R980nm)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

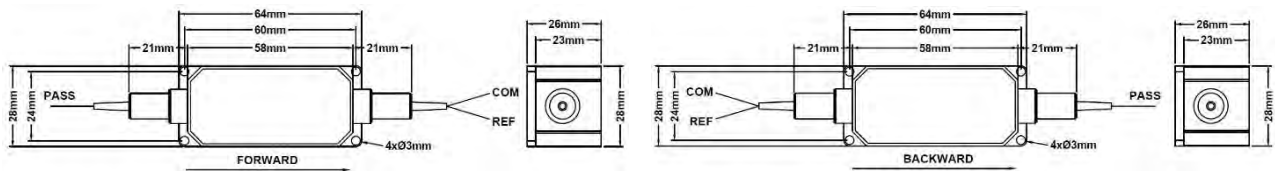
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameter	Unit	Value	
Signal Channel	Signal Wavelength Range	nm	1064±10 or 1030±10
	Max. Insertion Loss, at 23℃	dB	1.5
	Typ. Peak Signal Isolation, at 23℃	dB	30
	Min. Signal Isolation, at 23℃	dB	25
	Min. Isolation (Com to Pass @ Ref band Wavelength)	dB	30
Reflection Channel	Wavelength Range	nm	960~990
	Max. Insertion Loss	dB	0.8
	Min. Isolation (Com to Ref @ Pass band Wavelength)	dB	15
Max. Polarization Dependent Loss at 23℃, only for PI type	dB	0.15	
Min. Return Loss	dB	50	
Max. Optical Power(CW)	W	1,2,10	
Max. Tensile Load	N	5	
Operating Temperature	℃	5~+55	
Storage Temperature	℃	-0~+75	

Package Dimensions



Signal Route: Com to Pass
 Pump Route: Ref to Com

Signal Route: Pass to Com
 Pump Route: Ref to Com

Ordering Information

IWDM- A/B/C/D/E/F/G/H/I/J/K

A	-Center Wavelength:	1064=1064nm
B	-Core Stage:	S=Single-core stage, D=Dual-core stage
C	-Pump Type:	F=Forward, B=Backward
D	-Fiber Type for Signal:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
E	-Fiber Type for Ref	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
F	-Package Dimension:	0=58x28x26mm, S=Specified
G	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
H	-Fiber Length:	0=0.8m, 1=1m
I	-Connector for Com, Ref, Pass:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
J	-Average Power:	00=300mW, 01=1W, 02=2W,....., 05=5W....., 20=20W
K	-Peak Power	10=10kW, 20=20kW

Multi -Mode Pump Laser Protector (up to 30W)

Features

Low Insertion Loss
High Return Loss
High Reliability & Stability

Applications

EDFA
Pump Laser
Q-Switched Laser

Specifications

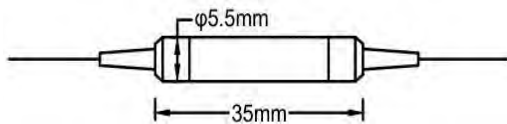
Parameters	Unit	Values
Pass Band Wavelength Range	nm	900~990, or Specified
Max.Insertion Loss over Pass Band Wavelength	dB	0.7
Blocked Band Wavelength Range	nm	1020~1100, or 1500~1600, or Specified
Min. Isolation	dB	25
Max. Polarization Dependent Loss	dB	0.15
Min. Return Loss	dB	30
Max. Power Handling (CW)	W	30
Max. Wavelength Thermal Stability	nm/°C	0.003
Max. Insertion Loss Thermal Stability	dB/°C	0.005
Fiber Type	-	Multi-mode fiber: 105/125,62.5/125, 50/125um
Package Dimension	mm	φ5.5x35mm steel tube (bare fiber or 900um loos tube)
Operating Temperature	°C	0~+70
Storage Temperature	°C	-40~+85

For device with connector, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB lower.

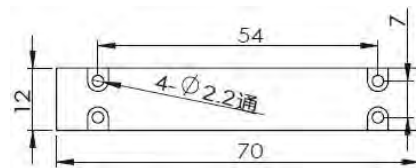
For device with connector, handling power is only 1W.

The default connector key is aligned to slow axis.

Package Dimensions



Max. Input Power:10W



Max.Input Power:30W

Ordering Information

MMPLP- A/B/C/D/E/F/G/H

A	1111	-Operating Wavelength:	9815=980nm pass/1550nm blocked, 9806=980nm pass/1064nm blocked
B	222	-Fiber Type:	009=Nufern Nufern MM-S105/125-22A
C	3	-Package Dimension:	0=φ5.5x35mm, S=Specified
D	4	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
E	5	-Fiber Length:	0=0.8m, 1=1m
F	66	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
G	77	-Average Power:	00=500mW, 01=1W,....., 30=30W
H	88	-Peak Power:	10=10kW, 20=20kW

1064nm Collimated Beam Output Isolator(up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

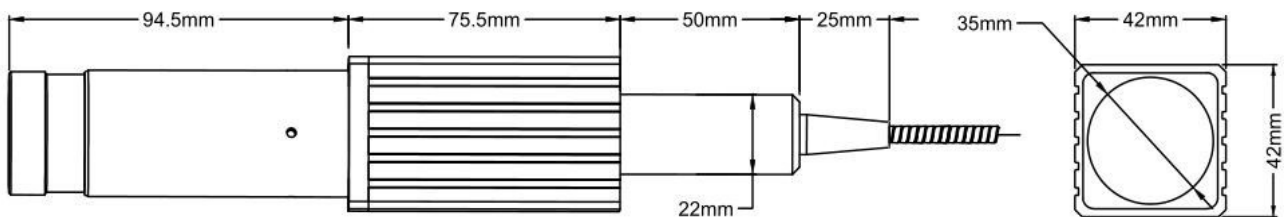
Applications

Fiber Laser Cutting
 MOPA Fiber Laser
 Fiber Laser Marking
 Fiber Amplifier

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1064 or Specified
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23℃	dB	30~35
Min. Isolation at 23℃	dB	28
Max. Insertion Loss at 23℃	dB	0.5
Max. Polarization Dependent Loss at 23℃, only for PI	dB	0.1
Min. Beam Roundness	%	90
Min. Return Loss(Input /Output)	dB	50
Nominal Output Beam Diameter (1/e ²)	mm	7±1 or Specified
Max. Average Optical Power	W	10, 20 or Specified
Max. Peak Power for ns Pulse	kW	10 or Specified
Max. Tensile Load	N	5
Operating Temperature	℃	+5~+55
Storage Temperature	℃	-5~+75

Package Dimensions



Ordering Information

HPCI- A/B/C/D/E/F/G/H

A	1064	-Center Wavelength:	1064=1064nm ,SSSS=specify
B	2	-Beam Diameter:	7=7mm,
C	333	-Fiber Type:	021=LMA-GDF-20/130-M, 031=LMA-GDF-30/250-M, S=Specified
D	4	-Package Dimension:	0=75.5x42x42mm
E	5	-Armoured Cable Length:	1=1m Armoured cable, 2=2m Armoured cable, S=Specified
F	6	-Fiber Tube Length:	1=1m 900um loose tube,
G	7	-Fiber Length:	1=1m,2=m,S=Specified
H	88	-Average Power:	10=10W,20=20W,SS=Specified
I	99	-Pulse Power:	10=10K, 20=20K

Pump Laser Protector(up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Reliability & Stability

Applications

EDFA
 Pump Laser
 Q-Switched Laser

Specifications

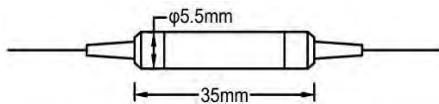
Parameters	Unit	Values
Pass Band Wavelength Range	nm	960~990, or Specified
Max.Insertion Loss over Pass Band Wavelength	dB	0.7
Blocked Band Wavelength Range	nm	1020~1100 or 1500~1600, or Specified
Min. Isolation	dB	25
Max. Polarization Dependent at 23°C, only for PI	dB	0.15
Min. Return Loss	dB	50
Max. Power Handling (CW)	W	30
Max. Pulsed Power	kW	10, 20 or Specified
Max. Wavelength Thermal Stability	nm/°C	0.003
Max. Insertion Loss Thermal Stability	dB/°C	0.005
Package Dimension	mm	φ5.5x35mm steel tube (bare fiber or 900um loos tube)
Operating Temperature	°C	0~+70
Storage Temperature	°C	-40~+85

For device with connector, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB lower.

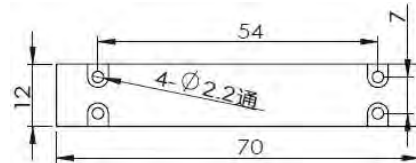
For device with connector, handling power is only 1W.

The default connector key is aligned to slow axis.

Package Dimensions



Max. Input Power:10W



Max.Input Power:30W

Ordering Information

PLP- A/B/C/D/E/F/G/H

A	-Operating Wavelength:	9815=980nm pass/1550nm blocked, 9806=980nm pass/1064nm blocked
B	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
C	-Package Dimension:	0=φ5.5x35mm, S=Specified
D	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
E	-Fiber Length:	0=0.8m, 1=1m
F	-Connector for In, Out:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
G	-Average Power:	00=500mW, 01=1W,....., 30=30W
H	-Peak Power:	10=10kW, 20=20kW

PM Pump Laser Protector(up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Reliability & Stability

Applications

EDFA
 Pump Laser
 Q-Switched Laser

Specifications

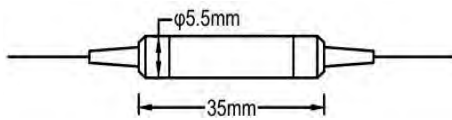
Parameters	Unit	Values
Pass Band Wavelength Range	nm	960~990, or Specified
Max.Insertion Loss over Pass Band Wavelength	dB	0.7
Blocked Band Wavelength Range	nm	1020~1100 or 1500~1600, or Specified
Min. Isolation	dB	25
Min. Extinction Ratio at 23℃, only for PM	dB	20
Min. Return Loss	dB	50
Max. Power Handling (CW)	W	30
Max. Pulsed Power	kW	10, 20 or Specified
Max. Wavelength Thermal Stability	nm/℃	0.003
Max. Insertion Loss Thermal Stability	dB/℃	0.005
Package Dimension		φ5.5x35mm steel tube (bare fiber or 900um loose tube)
Operating Temperature	℃	0~+70
Storage Temperature	℃	-40~+85

For device with connector, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB lower.

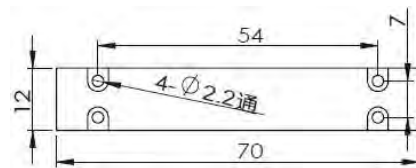
For device with connector, handling power is only 1W.

The default connector key is aligned to slow axis.

Package Dimensions



Max. Input Power:10W



Max.Input Power:30W

Ordering Information

PMPLP- A/B/C/D/E/F/G/H

A	-Operating Wavelength:	9815=980nm pass/1550nm blocked, 9806=980nm pass/1064nm blocked
B	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
C	-Package Dimension:	0=φ5.5x35mm, S=Specified
D	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
E	-Fiber Length:	0=0.8m, 1=1m
F	-Connector Type:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
G	-Average Power:	00=500mW, 01=1W,....., 30=30W
H	-Peak Power:	10=10kW, 20=20kW

PM Tap & Isolator & WDM Hybrid (up to 10W, 06/98)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

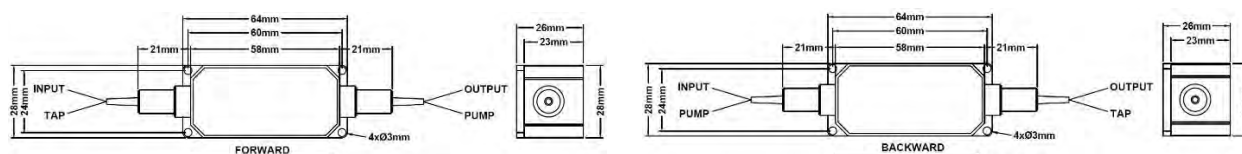
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameter	Unit	Value
Signal Wavelength Range	nm	1064±10 or 1030±10
Max. Excess Loss, λ_c , at 23°C (Input to Output)	dB	1.7+the theoretical value
Min. Signal Isolation, λ_c , at 23°C (Output to Input)	dB	25
Isolation for Channels	Signal Channel	dB
	Pump Channel	dB
Signal Tap Ratio	%	1,5,10,50 or specified
Pump Channel Wavelength Range	nm	960~990
Max. Insertion Loss (Pump Channel)	dB	0.8
Min. Extinction Ratio at 23°C, only for PM	dB	18
Min. Return Loss	dB	50
Max. Optical Power(CW)	W	1,2,10
Max. Tensile Load	N	5
Operating Temperature	°C	5~+55
Storage Temperature	°C	-0~+75

Package Dimensions



Option 1, Forward pump

Input to Tap: Both axis working
 Input to Output: Fast axis blocked

Option 2, Forward pump

Input to Tap: Both axis working
 Input to Output: Both axis working

Option 3, Backward pump

Input to Tap: Fast axis blocked
 Input to Output: Fast axis blocked

Option 4, Forward pump

Input to Tap: PM to SM, PI
 Input to Output: Fast axis blocked

Option 5, Forward pump

Input to Tap: PM to SM, PI
 Input to Output: Both axis working

Option 6, Backward pump

Input to Tap: PM to SM, PS
 Input to Output: Fast axis blocked

PI: Polarization Insensitive PS: Polarization Sensitive

Ordering Information

PMTIWDM- A/B/C/D/E/F/G/H/I/J/K/L/M

A	-Operating Wavelength:	1598=T1550/R980nm, 0398=T1030/980nm
B	-Axis Alignment:	1=Option 1, 2=Option 2, 3=Option 3, 4=Option 4, 5=Option 5, 6=Option 6
C	-Core Stage:	S=Single-core Stage, D=Dual-core Stage
D	-Tap ratio:	01=1%, 02=2%,, 50=50%
E	-Fiber type for In & Out:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
F	-Fiber type for Pump:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
G	-Fiber type for Tap:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
H	-Package Dimension:	0=58x28x26mm, 1=150x28x26mm
I	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
J	-Fiber Length:	0=0.8m, 1=1m
K	-Connector for In,Out,Pump, Tap:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
L	-Average Power:	00=300mW, 01=1W, 02=2W,, 05=5W....., 20=20W
M	-Peak Power	10=10kW, 20=20kW

PM Tap & Isolator & WDM Hybrid (up to 20W, 06/98)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

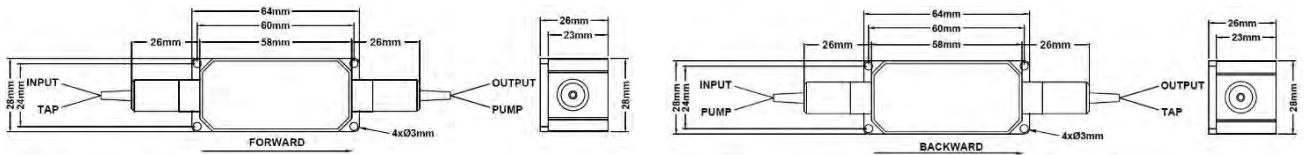
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameter	Unit	Value
Signal Wavelength Range	nm	1064±10 or 1030±10
Max. Excess Loss, λ_c , at 23°C (Input to Output)	dB	1.7+the theoretical value
Min. Signal Isolation, λ_c , at 23°C (Output to Input)	dB	25
Isolation for Channels	Signal Channel	dB
	Pump Channel	dB
Signal Tap Ratio	%	1,5,10,50 or specified
Pump Channel Wavelength Range	nm	960~990
Max. Insertion Loss (Pump Channel)	dB	0.8
Min. Extinction Ratio at 23°C, only for PM	dB	18
Min. Return Loss	dB	50
Max. Optical Power(CW)	W	1,2,20
Max. Tensile Load	N	5
Operating Temperature	°C	5~+55
Storage Temperature	°C	-0~+75

Package Dimensions



Option 1, Forward pump

Input to Tap: Both axis working
 Input to Output: Fast axis blocked

Option 2, Forward pump

Input to Tap: Both axis working
 Input to Output: Both axes working

Option 3, Backward pump

Input to Tap: Fast axis blocked
 Input to Output: Fast axis blocked

Option 4, Forward pump

Input to Tap: PM to SM, PI
 Input to Output: Fast axis blocked

Option 5, Forward pump

Input to Tap: PM to SM, PI
 Input to Output: Both axis working

Option 6, Backward pump

Input to Tap: PM to SM, PS
 Input to Output: Fast axis blocked

PI: Polarization Insensitive PS: Polarization Sensitive

Ordering Information

PMTIWDM- A/B/C/D/E/F/G/H/I/J/K/L/M

A	-Operating Wavelength:	1598=T1550/R980nm, 0398=T1030/980nm
B	-Axis Alignment:	1=Option 1, 2=Option 2, 3=Option 3, 4=Option 4, 5=Option 5, 6=Option 6
C	-Core Stage:	S=Single-core Stage, D=Dual-core Stage
D	-Tap ratio:	01=1%, 02=2%,, 50=50%
E	-Fiber type for In & Out:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
F	-Fiber type for Pump:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
G	-Fiber type for Tap:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
H	-Package Dimension:	0=58x28x26mm, 1=150x28x26mm
I	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
J	-Fiber Length:	0=0.8m, 1=1m
K	-Connector for In,Out,Pump, Tap:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
L	-Average Power:	00=300mW, 01=1W, 02=2W,, 05=5W....., 20=20W
M	-Peak Power	10=10kW, 20=20kW

1064nm PM Collimated Beam Output Isolator(up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

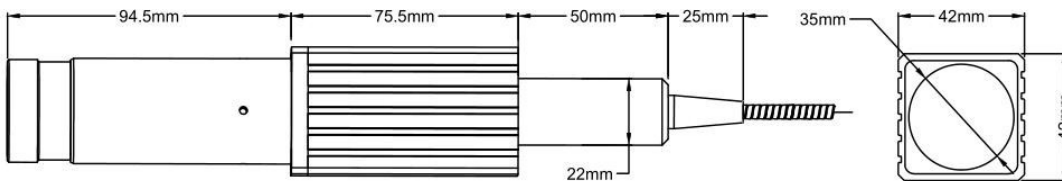
Applications

Fiber Laser Cutting
 MOPA Fiber Laser
 Fiber Laser Marking
 Fiber Amplifier

Specifications

Parameters	Unit	Value
Center Wavelength	nm	1064 or Specified
Operating Wavelength Range	nm	±5
Typ. Peak Isolation at 23°C	dB	30~35
Min. Isolation at 23°C	dB	28
Max. Insertion Loss at 23°C	dB	0.5
Min. Extinction Ratio at 23°C, only for PM	dB	20
Min. Beam Roundness	%	90
Min. Return Loss(Input /Output)	dB	50
Nominal Output Beam Diameter (1/e ²)	mm	7±1 or Specified
Max. Average Optical Power	W	10, 20 or Specified
Max. Peak Power for ns Pulse	kW	10 or Specified
Max. Tensile Load	N	5
Operating Temperature	°C	+5~+55
Storage Temperature	°C	-5~+75

Package Dimensions



Ordering Information

HPMCI- A/B/C/D/E/F/G/H/I/J

A	-Center Wavelength:	1064=1064nm , S=specify
B	-Alignment Type:	F=Slow axis working, Fast axis blocked, B=Both axis working
C	-Beam Diameter:	7=7mm,
D	-Fiber Type:	020=PLMA-GDF-20/130-M, 030=PLMA-GDF-30/250-M, S=Specified
E	-Package Dimension:	0=75.5x42x42mm
F	-Armoured Cable Length:	1=1m Armoured cable, 2=2m Armoured cable, S=Specified
G	-Fiber Tube Length:	1=1m 900um loose tube,
H	-Fiber Length:	1=1m, 2=m, S=Specified
I	-Average Power:	10=10W, 20=20W, SS=Specified
J	-Pulse Power:	10=10K, 20=20K

PM Isolator+WDM Hybrid (TGG Based, up to 10W,06/98)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

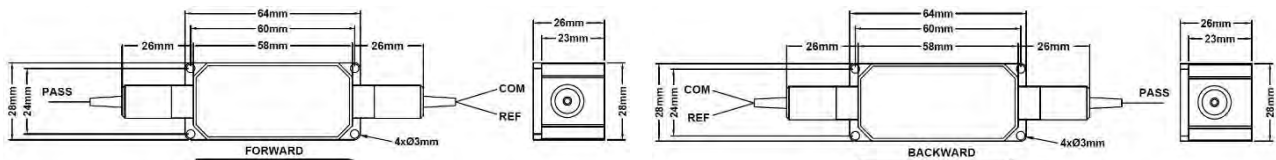
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameter	Unit	Value	
Signal Channel	Signal Wavelength Range	nm	1064±10 or 1030±10
	Max. Insertion Loss, at 23℃	dB	1.5
	Typ. Peak Signal Isolation, at 23℃	dB	30
	Min. Signal Isolation, at 23℃	dB	25
	Min. Isolation (Com to Pass @ Ref band Wavelength)	dB	30
Reflection Channel	Wavelength Range	nm	960~990
	Max. Insertion Loss	dB	0.8
	Min. Isolation (Com to Ref @ Pass band Wavelength)	dB	15
Min. Extinction Ratio at 23℃, only for PM type		dB	18
Min. Return Loss		dB	50
Max. Optical Power(CW)		W	1,2,10
Max. Tensile Load		N	5
Operating Temperature		℃	5~+55
Storage Temperature		℃	-0~+75

Package Dimensions



Signal Route: Com to Pass
 Pump Route: Ref to Com

Signal Route: Pass to Com
 Pump Route: Ref to Com

Ordering Information

PMIWDM- A/B/C/D/E/F/G/H/I/J/K/L

A	-Center Wavelength:	1064=1064nm
B	-Core Stage:	S=Single-core stage, D=Dual-core stage
C	-Pump Type:	F=Forward, B=Backward
D	-Axis Alignment for Signal Route:	B=Both Axis Working, F=Slow Axis Working, Fast Axis Blocked
E	-Fiber Type for Signal:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
F	-Fiber Type for Ref	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
G	-Package Dimension:	0=58x28x26mm, S=Specified
H	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
I	-Fiber Length:	0=0.8m, 1=1m
J	-Connector for Com, Ref, Pass:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
K	-Average Power:	00=300mW, 01=1W, 02=2W,....., 05=5W....., 20=20W
L	-Peak Power	10=10kW, 20=20kW

PM Isolator+WDM Hybrid (TGG Based, up to 20W,06/98)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

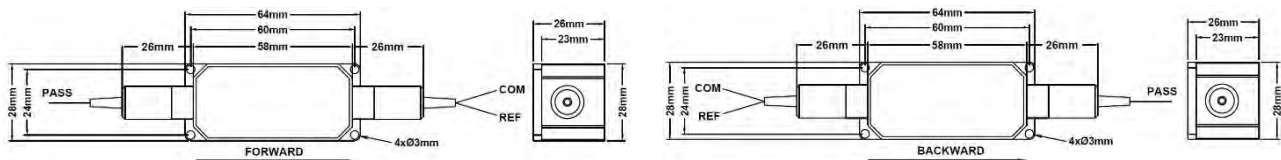
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameter	Unit	Value	
Signal Channel	Signal Wavelength Range	nm	1064±10 or 1030±10
	Max. Insertion Loss, at 23°C	dB	1.5
	Typ. Peak Signal Isolation, at 23°C	dB	30
	Min. Signal Isolation, at 23°C	dB	25
	Min. Isolation (Com to Pass @ Ref band Wavelength)	dB	30
Reflection Channel	Wavelength Range	nm	960~990
	Max. Insertion Loss	dB	0.8
	Min. Isolation (Com to Ref @ Pass band Wavelength)	dB	15
Min. Extinction Ratio at 23°C, only for PM type		dB	18
Min. Return Loss		dB	50
Max. Optical Power(CW)		W	1,2,20
Max. Tensile Load		N	5
Operating Temperature		°C	5~+55
Storage Temperature		°C	-0~+75

Package Dimensions



Signal Route: Com to Pass
 Pump Route: Ref to Com

Signal Route: Pass to Com
 Pump Route: Ref to Com

Ordering Information

PMIWDM- A/B/C/D/E/F/G/H/I/J/K/L

A	-Center Wavelength:	1064=1064nm
B	-Core Stage:	S=Single-core stage
C	-Pump Type:	F=Forward, B=Backward
D	-Axis Alignment for Signal Route:	B=Both Axis Working, F=Slow Axis Working, Fast Axis Blocked
E	-Fiber Type for Signal:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
F	-Fiber Type for Ref	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
G	-Package Dimension:	0=58x28x26mm, S=Specified
H	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
I	-Fiber Length:	0=0.8m, 1=1m
J	-Connector for Com, Ref, Pass:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
K	-Average Power:	00=300mW, 01=1W, 02=2W,....., 05=5W....., 20=20W
L	-Peak Power	10=10kW, 20=20kW

1310nm/1550nm PM Optical Isolator (up to 20W)

Features

Low Insertion Loss
 High Return Loss
 High Extinction Ratio
 High Isolation
 High Stability & Reliability

Applications

Communication Systems
 Test Instrument
 Fiber Sensor
 Research

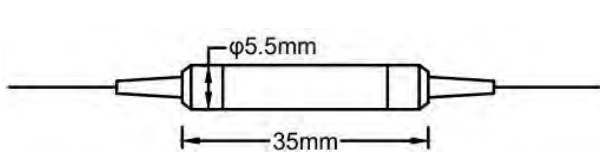
Specifications

Parameter	Unit	Value			
		Single		Dual	
Stage	-	P	A	P	A
Grade	-	P	A	P	A
Center Wavelength	nm	1310 or 1550			
Operating Wavelength Range	nm	±20			
Typ. Peak Isolation at 23°C	dB	42	40	58	55
Min. Isolation at 23°C	dB	28	26	48	45
Typ. Insertion Loss at 23°C	dB	0.4	0.5	0.5	0.6
Max. Insertion Loss at 23°C	dB	0.55	0.65	0.65	0.8
Min. Extinction Ratio at 23°C (only for Both Axis Working)	dB	20	18	20	18
Min. Extinction Ratio at 23°C (only for Fast Axis Blocked)	dB	25	23	25	23
Min. Return Loss (input/output)	dB	50/50			
Package dimension		φ5.5x35mm steel tube(bare fiber or 900um loose tube)			
Max. Tensile Load	N	5			
Operating Temperature	°C	-5~+70			
Storage Temperature	°C	-40~+85			

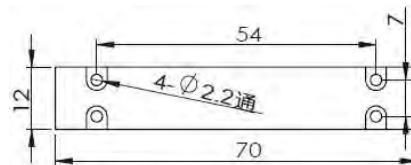
For device with connector, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB lower.

The default connector key is aligned to slow axis.

Package Dimensions



Max. Input Power: 10W



Max. Input Power: 20W

Ordering Information

PMIS- A/B/C/D/E/F/G/H/I/J/K

A	-Center Wavelength:	1550=1550nm, 1310=1310nm.....
B	-Grade:	P=P grade, A=A grade
C	-Stage:	S=Single-core stage, D=Dual-core stage
D	-Axis Alignment:	F=Slow axis working, Fast axis blocked, B=Both of axis working
E	-Fiber Type:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
F	-Package Dimension:	0=φ5.5x35mm, 1=70x12x8mm, S=Specified
G	-Pigtail Type:	0=250μm bare fiber, 1=900μm loose tube
H	-Fiber Length:	0=0.8m, 1=1m
I	-Connector for In, Out:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC, N=None
J	-Average Power:	10=10W, 20=20W
K	-Peak Power:	10=10K, 20=20K

Tap & Isolator & WDM Hybrid (up to 10W)

Features

Low Insertion Loss
 High Return Loss
 High Isolation
 High stability & Reliability

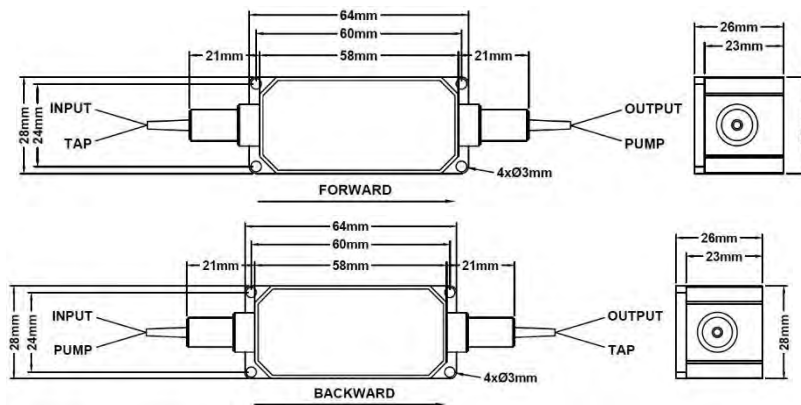
Applications

PM Fiber Amplifier
 Testing Instrument
 MOPA Fiber Laser
 Fiber Laser

Specifications

Parameter	Unit	Value
Signal Wavelength Range	nm	1064 ± 10 or 1030 ± 10
Max. Excess Loss, λ_c , at 23°C (Input to Output)	dB	1.7+the theoretical value
Min. Signal Isolation, λ_c , at 23°C (Output to Input)	dB	25
Isolation for Channels	Signal Channel	dB
	Pump Channel	dB
Signal Tap Ratio	%	1,5,10,50 or specified
Pump Channel Wavelength Range	nm	960~990
Max. Insertion Loss (Pump Channel)	dB	0.8
Max. Polarization Dependent Loss at 23°C, only for PI	dB	0.15
Min. Return Loss	dB	50
Max. Optical Power(CW)	W	1,2, ... 10
Max. Tensile Load	N	5
Operating Temperature	°C	5~+55
Storage Temperature	°C	-0~+75

Package Dimensions



Option 1, Forward pump

Input to Tap: PI
 Pump to Output: PI
 Input to Output: PS

Option 2, Forward pump

Input to Tap: PI
 Pump to Output: PI
 Input to Output: PI

Option 3, Backward pump

Input to Tap: PS
 Pump to Input: PI
 Input to Output: PS

PI: Polarization Insensitive PS:
Polarization Sensitive

Ordering Information

TIWDM- A/B/C/D/E/F/G/H/I/J/K/L/M

A	-Operating Wavelength:	1598=T1550/R980nm, 0398=T1030/980nm
B	-Axis Alignment:	1=Option 1, 2=Option 2, 3=Option 3, 4=Option 4, 5=Option 5, 6=Option 6
C	-Core Stage:	S=Single-core Stage, D=Dual-core Stage
D	-Tap ratio:	01=1%, 02=2%,, 50=50%
E	-Fiber type for In & Out:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
F	-Fiber type for Pump:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
G	-Fiber type for Tap:	001=PM1550, 002=PM1310, 003=PM980, 004=Hi1060, 008=SMF-28E
H	-Package Dimension:	0=58x28x26mm, 1=150x28x26mm
I	-Pigtail Type:	0=250µm bare fiber, 1=900µm loose tube
J	-Fiber Length:	0=0.8m, 1=1m
K	-Connector for In,Out,Pump, Tap:	0=FC/UPC, 1=FC/APC, 2=SC/UPC, 3=SC/APC, 4=LC/UPC, 5=LC/APC
L	-Average Power:	00=300mW, 01=1W, 02=2W,, 05=5W....., 20=20W
M	-Peak Power	10=10kW, 20=20kW