

(Compact) 2W 1064nm In-line Isolator+BPF

Description

The 2W 1064nm in-line isolator+BPF(Band-pass filter) is characterized with low cost and compact size. It is characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. It is ideal for fiber laser and instrumentation applications.

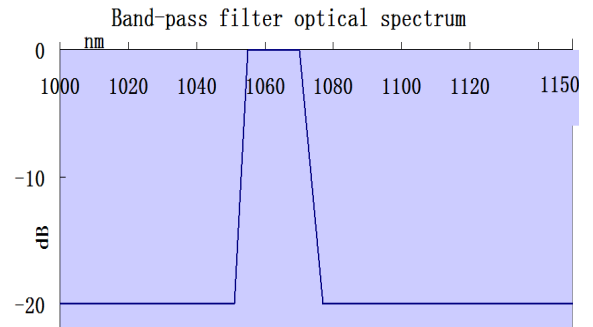
Key Features

- * High isolation and low insertion loss
- * PM and Non-PM are available; Fiber can be customized
- * Excellent environmental stability and reliability

Applications

- * Fiber laser
- * Fiber sensor

Specifications



Parameter	Type	2W in-line isolator+BPF		
		Non -PM isolator+BPF		PM isolator+BPF
Pass wavelength (nm)		1064±4	1064±2	1064±1
Pass bandwidth@-20dB from peak (nm)		≤25	≤12	≤8
Filter wavelength(nm)		1000~1150 (exclude pass bandwidth)		
Typ. peak isolation at operating wavelength (dB)		≥35		
Isolation at operating wavelength (dB)		≥28		
Insertion loss at pass wavelength 23°C(dB) (Input 1mW power)		≤2.5		
Insertion loss at pass wavelength 23°C(dB) (Input max. power)		≤3.0		
Polarization dependent loss (dB)		≤0.15	/	
Extinction ratio (dB)		/	≥18(B) , ≥20(F)	
Return loss (Input/Output) (dB)		≥50		
Fiber type		HI1060,etc.	SM98-PS-U25D-H, etc.	
Input max. power handling	Average (W)	2	1	
	Pulse peak(W)	1000, higher on demand		
Operating temperature (°C)		-5 ~ +50		
Storage temperature (°C)		-20 ~ +70		
Dimensions (L×W×H)(mm)		75*12*12		

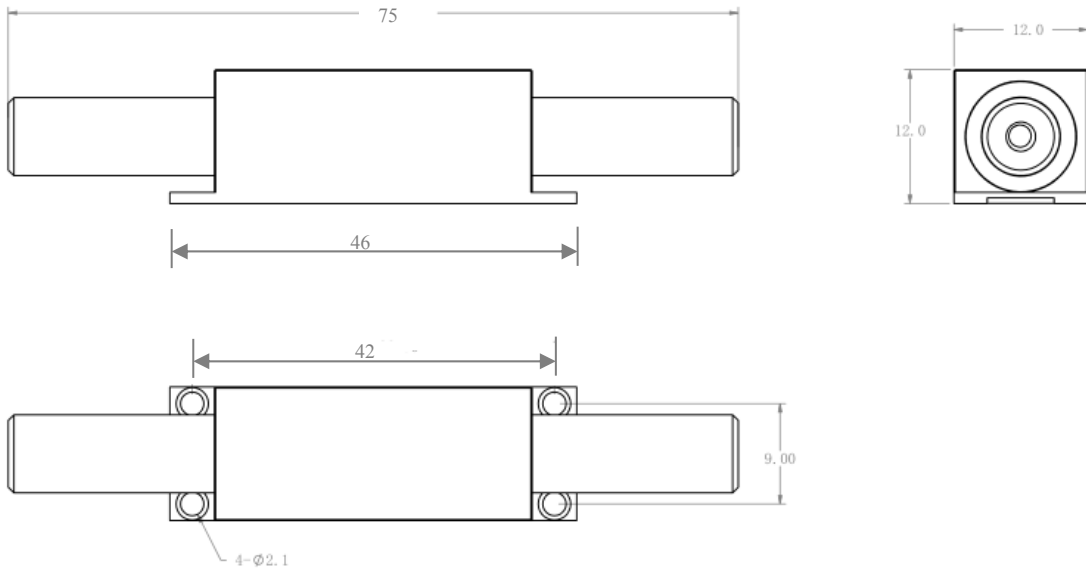
*“B” for both axis working, “F” for slow axis working and fast axis blocking.

* Backward power<10% input power

* Insertion loss: Pass wavelength of IL (1064± 4/2/1nm), other wavelengths IL is not in this specification.

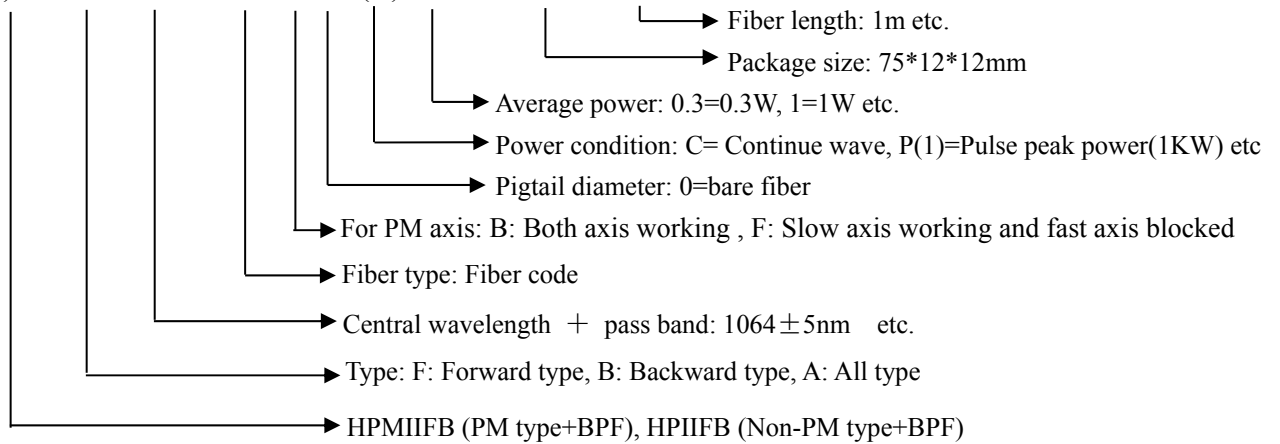
* Insertion loss of light through fiber cladding is not included in the Insertion loss specification

Mechanical Dimension (unit: mm)

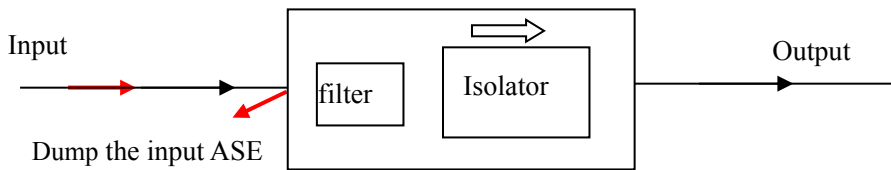


Ordering Information

HP(M)IIFB-X-XXXX-XXX-X-X-X(X)- X -XX*XX*XX-XX

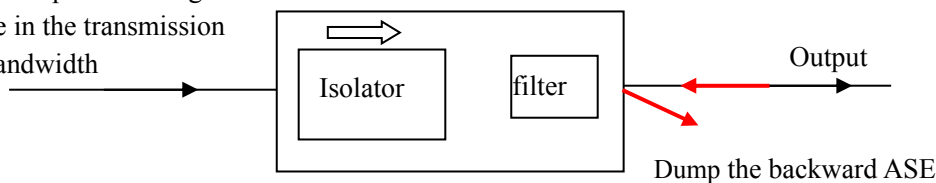


Forward type: (Dump the input ASE)



Backward type: (Dump the backward ASE)

The input wavelength must be in the transmission bandwidth



100W High Power Polarization Maintain In-line Isolator, HPMIIT

Description

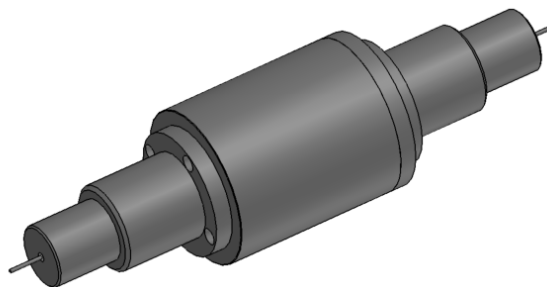
The high power isolator series includes in-line type, beam expanded isolator, fiber in and free space out isolator and free space isolator etc., They're characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. They are ideal for fiber laser and instrumentation applications.

Key Features

- * High isolation and low insertion loss
- * Excellent environmental stability and reliability
- * Fiber can be customized

Applications

- * Fiber Laser
- * Fiber Sensor



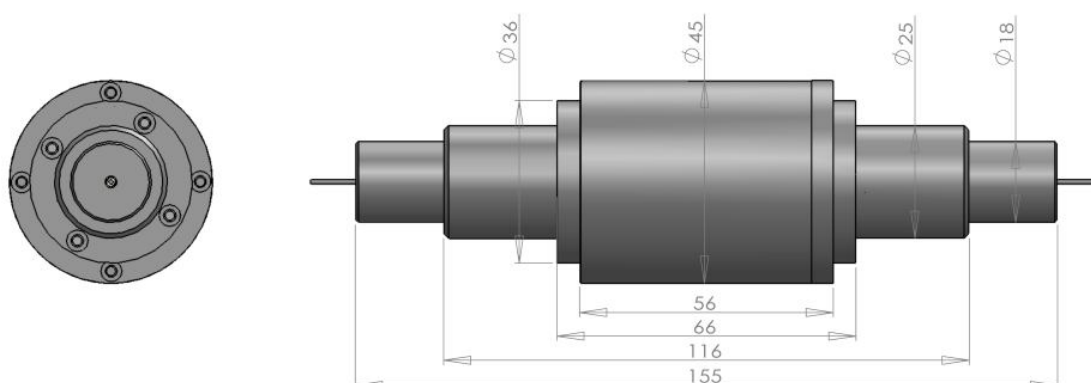
HPMIIT

Specifications

Parameter		Type	High power in-line isolator, HPMIIT
			PM isolator
Operating wavelength (nm)			1064±5
Peak isolation (dB)			35
Isolation in band at 23 °C (dB)			≥28
Insertion loss at 23 °C (dB)			≤1.5
Extinction ratio (dB)			≥16
Return loss (dB)			≥50
Fiber type	Input Fiber		Liekki PM 10/125 SCF
	Output Fiber		Liekki PM 10/125 DCF
Input max. power handling Average (W)			100
Operating Temperature (°C)			-5 ~ +50
Storage Temperature (°C)			-20 ~ +70
Dimensions (Φ x L mm)			Φ 45 x L155

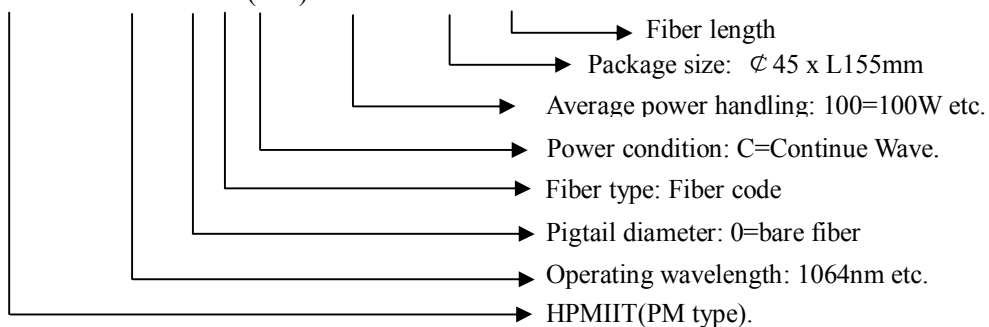
- * Both single cladding fiber (SCF) and double cladding fiber (DCF) are available.
- * Working axis: Fast axis blocked.
- * Backward power < 10% of the Input Power.
- * The isolator is suggested to be assembled on the heat sink with air cooled.
- * The loss of the light through fiber cladding is not included in the Insertion Loss specification.

Mechanical Dimensions (Unit: mm)



Ordering Information

HPMIIT-XXXX-X-X-X(XX)- X -XX*XX- X



300mW 1064nm In-line Dual Isolator

Description

The 300mW 1064nm in-line dual isolator is characterized with low cost and compact size. We developed a kind of effective heat dissipation technique which could down the isolator temperature. It is characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. It is ideal for fiber laser and instrumentation applications.

Key Features

- * High isolation and low insertion loss
- * Excellent environmental stability and reliability
- * Customized fiber type available



Applications

- * Fiber laser
- * Fiber sensor

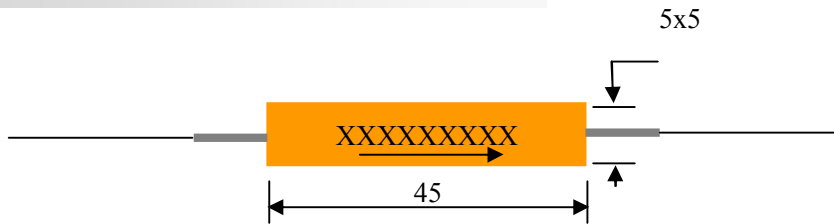
Specifications

Parameter	Type	Dual stage
Operating wavelength(nm)		1064±5
Typ. peak isolation(dB)		52
Isolation in band at 23℃(dB)		≥45
Insertion loss at 23℃(dB) (Input 1mw power)		≤2.5
Insertion loss at 23℃(dB) (Input max. power)		≤3.3
Polarization dependent loss(dB)		≤0.15
Return loss (Input/Output) (dB)		≥50
Fiber type		HI1060
Input max. power handling	Average (mW)	300
	Pulse peak(W)	1000
Operating temperature (℃)		-5 ~ +50
Storage temperature (℃)		-20 ~ +70
Dimensions(mm)		5*5*45

* Backward power<10% input power.

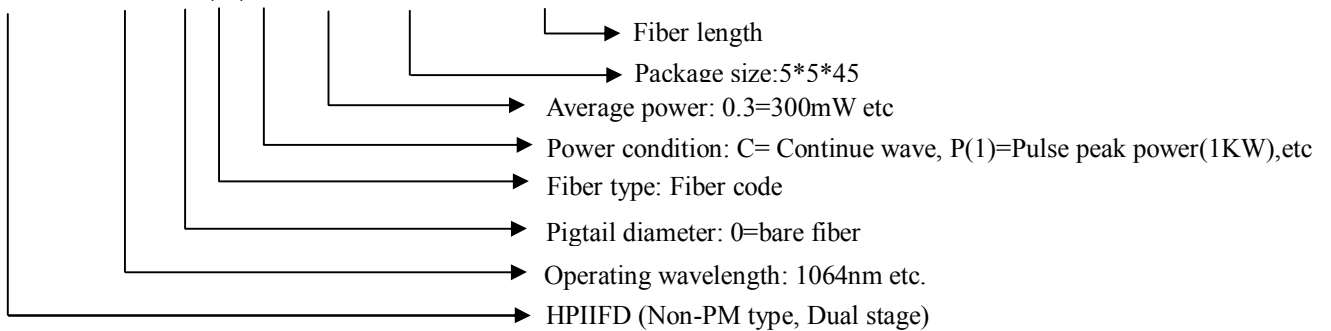
* Insertion loss of light through fiber cladding is not included in the Insertion loss specification.

Mechanical Dimension (Unit: mm)



Ordering Information

HPIIFD-XXXX-X-X-X(X)- X -XX*XX*XX-XX



(Compact) 2W 1064nm In-line Isolator, HP(M)IIF

Description

The 2W 1064nm in-line isolator is characterized with low cost and compact size. It is characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. The effective heat dissipation technique developed by lightcomm ensures the isolator shows exceptional performance under high power and long time operation, It is ideal for fiber laser and instrumentation applications.

Key Features

- * High isolation and low insertion loss
- * PM and Non-PM are available
- * Excellent environmental stability and reliability
- * Customized fiber type available



Applications

- * Fiber laser
- * Fiber sensor

Specifications

Parameter	Type	2W in-line isolator	
		Non-PM isolator	PM isolator
Operating wavelength(nm)		1064±5	
Peak isolation(dB)		35	
Isolation in band at 23℃ (dB)		≥28	
Insertion loss at 23℃ (dB) (Input 1mW power)		≤2.2	
Insertion loss at 23℃ (dB) (Input max. power)		≤2.6	
Polarization dependent loss (dB)		≤0.15	/
Extinction ratio (dB)		/	≥18 (Type B), ≥20 (Type F)
Return loss (Input/Output) (dB)		≥50	
Fiber type		HI1060, x/125; PM980; PM x/125, etc. (x=10um, 15um, 20um etc.)	
Input max. power handling	Average (W)	2	1
	Pulse peak(W)	1000, higher on demand	
Operating temperature (℃)		-5 ~ +50	
Storage temperature (℃)		-20 ~ +70	
Dimensions (L×W×H)(mm)		75*12*12	

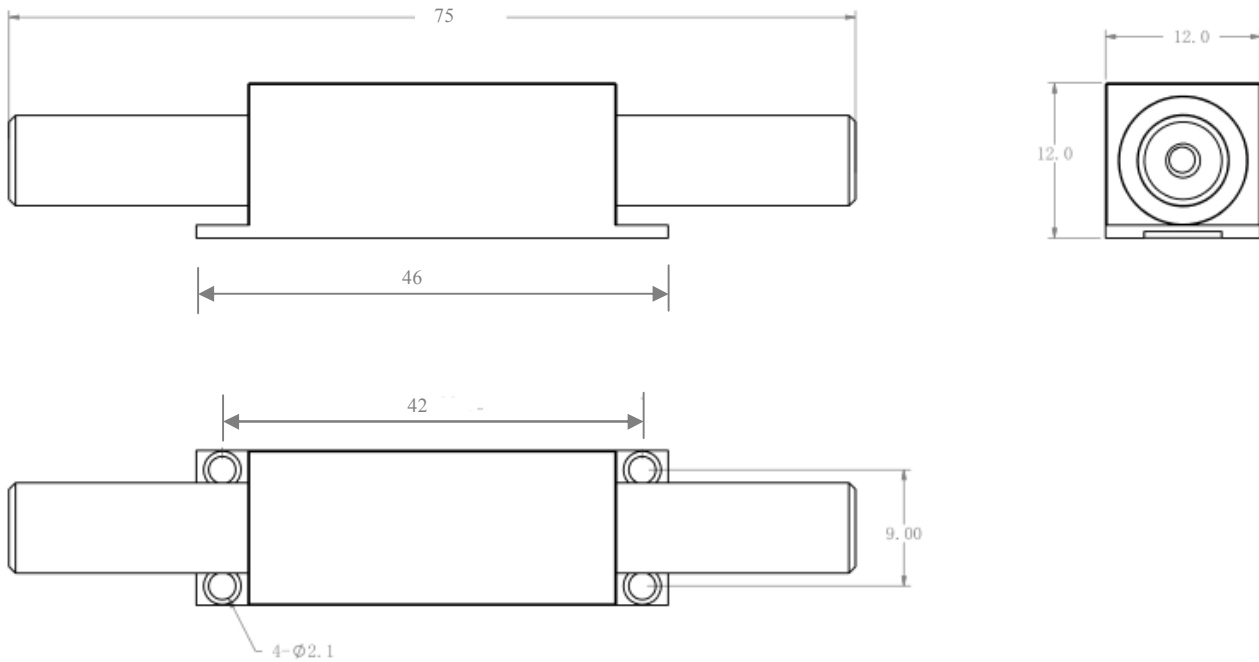
*“B” for both axis working , “F” for slow axis working and fast axis blocking.

* Backward power<10% input power.

* Other specifications can be made on customer request.

* Insertion loss of light through fiber cladding is not included in the Insertion loss specification

Mechanical Dimension (Unit: mm)



Ordering Information

HP(M)IIF-XXXX-XXX-X-X-X(X)- X -XX*XX*XX-XX

- Fiber length: 1m etc.
- Package size: 75*12*12mm
- Average power: 0.5=0.5W, 1=1W, 2=2W etc.
- Power condition: C= Continue wave, P(1)=Pulse peak power(1KW) etc
- Pigtail diameter: 0=bare fiber
- For PM axis: B: Both axis working , F: Slow axis working and fast axis blocked
- Fiber type: Fiber code
- Central wavelength: 1064nm ,1080nm etc.
- HPMIIF (PM type), HPIIF (Non-PM type)

500mW 1064nm In-line Isolator+BPF

Description

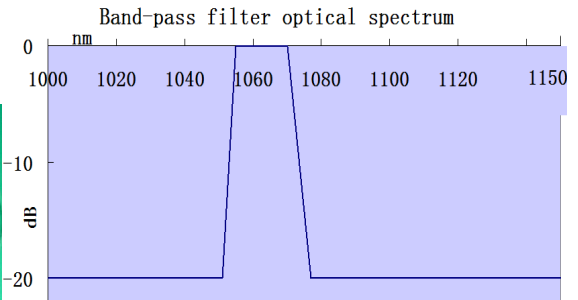
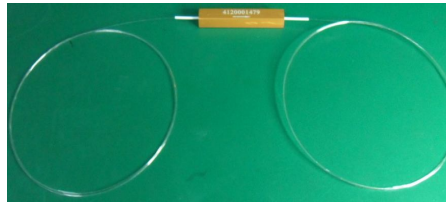
The 500mW 1064nm in-line isolator+BPF(Band-pass filter) is characterized with low cost and compact size. Lightcomm developed a kind of effective heat dissipation technique that the Isolator temperature will be fall down. It is characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. It is ideal for fiber laser and instrumentation applications.

Key Features

- * High isolation and low insertion loss
- * PM and Non-PM are available
- * High beam quality
- * Fiber can be customized

Applications

- * Fiber laser
- * Fiber sensor



Specifications

Parameter	Type	Non-PM isolator		PM isolator
		Single stage		
Pass wavelength (nm)		1064±4	1064±2	1064±1
Pass bandwidth @-20dB from peak (nm)		≤25	≤12	≤8
Filter wavelength(nm)		1000~1150 (exclude pass bandwidth)		
Typical. peak isolation at operating wavelength (dB)		38		
Isolation at operating wavelength (dB)		≥30		
Insertion loss at pass wavelength 23℃ (dB) (Input 1mW power) *		≤2.2		
Insertion loss at pass wavelength 23℃ (dB) (Input max. power) *		≤2.5		
Polarization dependent loss(For non -PM)(dB)		≤0.15	/	
Extinction ratio(For PM) (dB)*		/	≥18(B) , ≥20(F)	
Return loss (Input/Output) (dB)		≥50		
Fiber type		HI1060(Non-PM) , SM98-PS-U25A(PM),etc		
Input max. power handling	Average (mW)*	500	300	
	Pulse peak(W)	1000		
Operating temperature (℃)		-5 ~ +50		
Storage temperature (℃)		-20 ~ +70		
Dimensions(mm)		5*5*45		

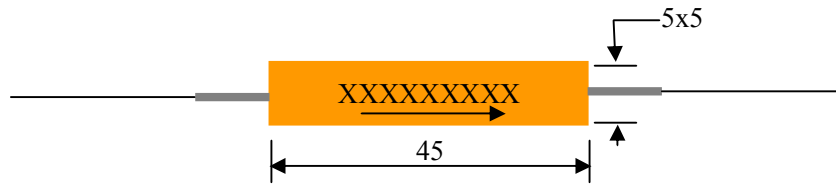
*“B” for both axis working , “F” for slow axis working and fast axis blocking.

* Backward power<10% input power

* Insertion loss: Pass wavelength of IL (1064± 4/2/1nm), other wavelengths IL is not in this specification.

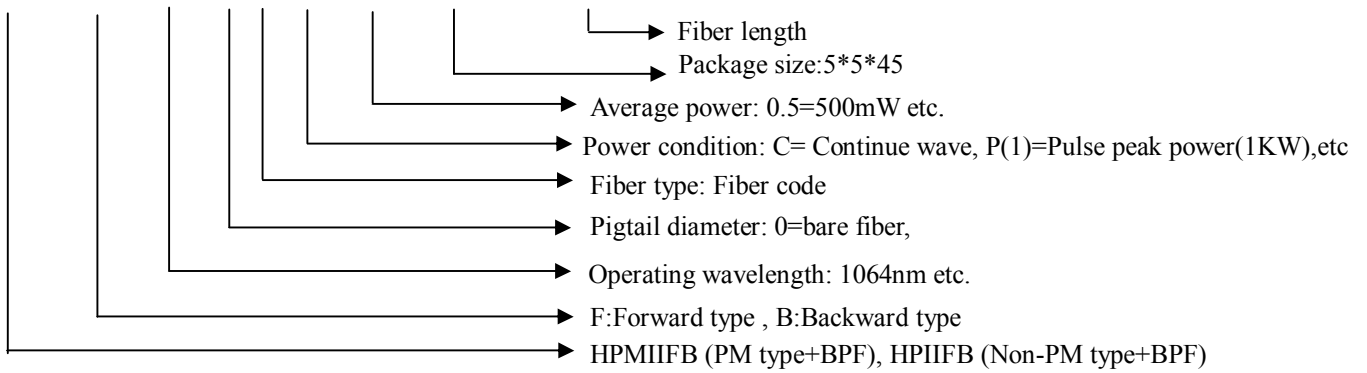
* Insertion loss of light through fiber cladding is not included in the Insertion loss specification

Mechanical Dimension (Unit: mm)

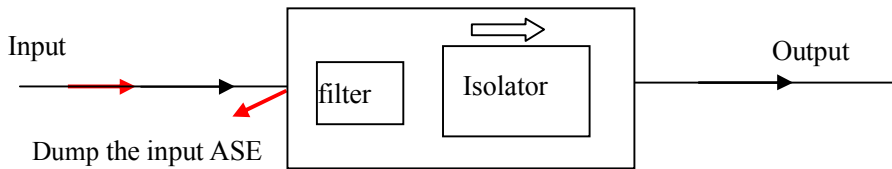


Ordering Information

HP(M)IIFB-X-XXXX-X-X-X(X)- X -XX*XX*XX-XX

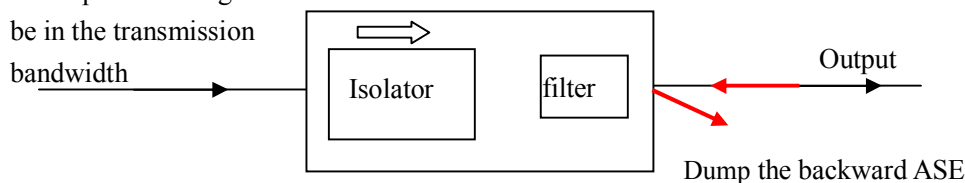


Forward type: (Dump the input ASE)



Backward type: (Dump the backward ASE)

The input wavelength must be in the transmission bandwidth



PM 1060nm In-line Isolator+TAP

Description

The PM 1060nm in-line isolator+Tap is characterized with low cost and compact size. It is characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. It is ideal for fiber laser and instrumentation applications.

Key Features

- * High isolation and low insertion loss
- * PM and Non-PM are available; Fiber can be customized
- * Excellent environmental stability and reliability



Applications

- * Fiber laser
- * Fiber sensor

Specifications

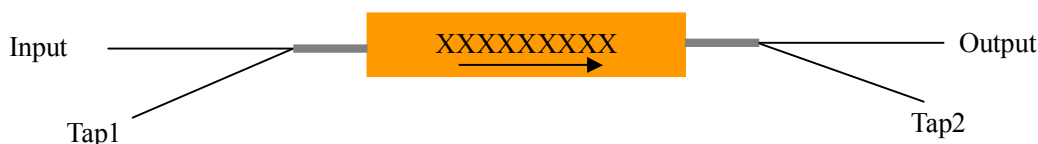
Parameter	Type	PM isolator	
		Single stage	
Operating wavelength (nm)		1060±4	1080±4
Insertion loss @CW. (dB)	Input→Tap1 (1%)	≤21	
	output→Tap2 (1%)		
Typ. peak isolation at output→input (dB)		35	
Isolation in band at output→input @ 23°C (dB)		≥28	
Insertion loss at input→output @ 23°C (dB)	Input 1mw power	≤2.5	≤2
	Input max. power	≤3.0	≤2.5
Extinction ratio(For PM) (dB)*		≥18(B) ; ≥20(F)	
Return loss (Input/Output) (dB)		≥50	
Fiber type	Input & output	SM98-PS-U25D-H (PM) etc.	
	Tap	HI1060(Non-PM) etc.	
Input max. power handling	Average (mW)	300	
	Pulse peak(W)	1000	
Operating temperature (°C)		-5 ~ +50	
Storage temperature (°C)		-20 ~ +70	
Dimensions L*W*H(mm)		75*12*12	

*“B” for both axis working , “F” for slow axis working and fast axis blocking.

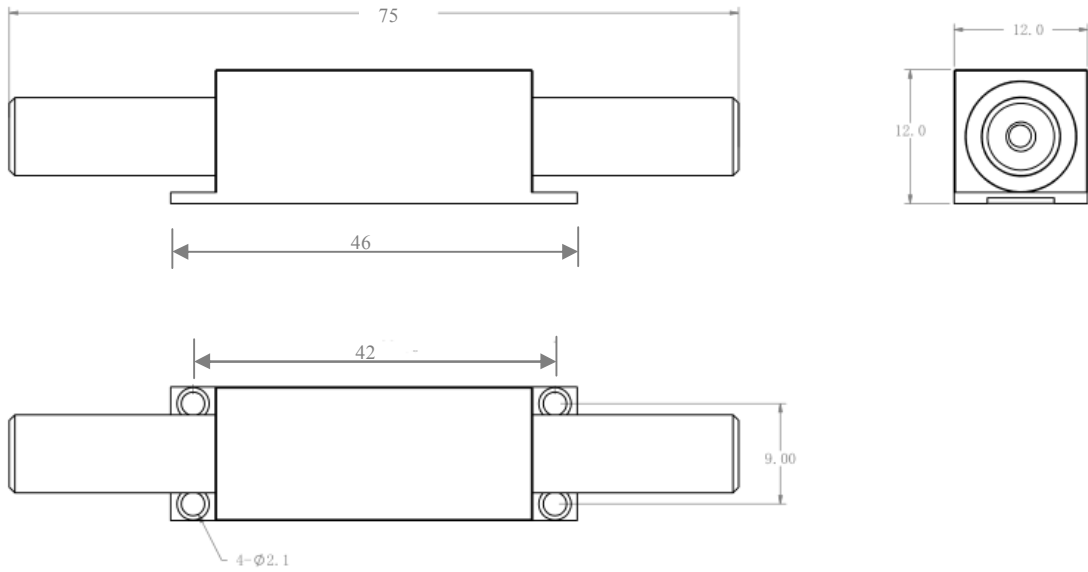
* Backward power<10% input power

* Other specifications can be made on customer request.

* Insertion loss of light through fiber cladding is not included in the Insertion loss specification

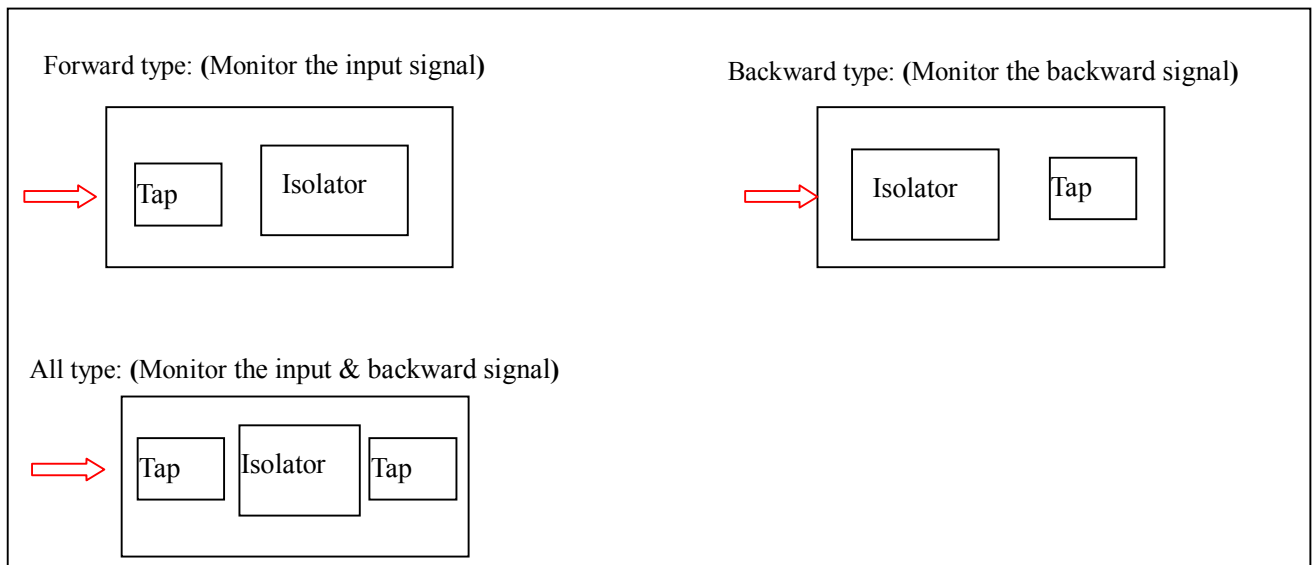
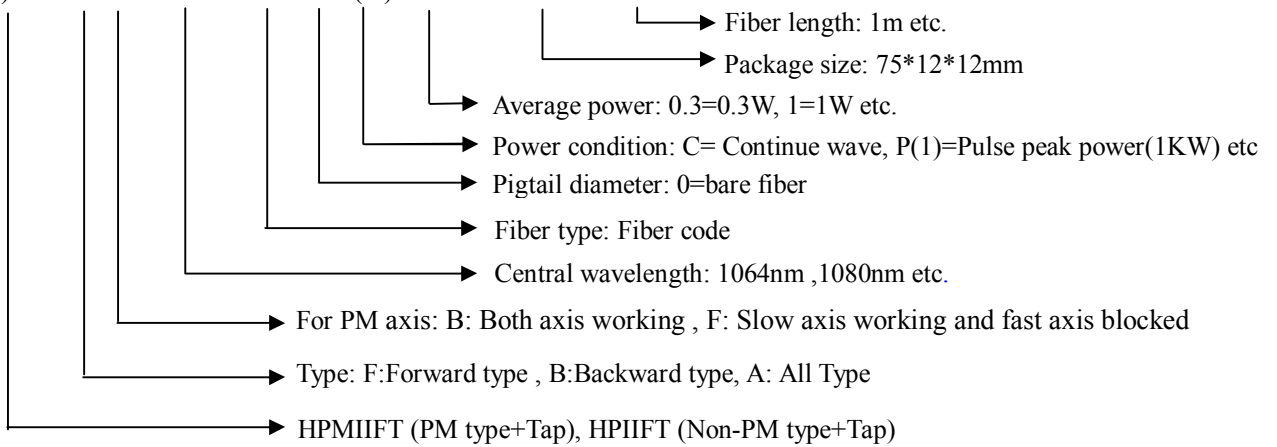


Mechanical Dimension (unit: mm)



Ordering Information

HP(M)IIFT-X-X-XXXX-XXX-X-X(X)- X -XX*XX*XX-XX



High Power In-line Isolator, HP(M)IIT

Description

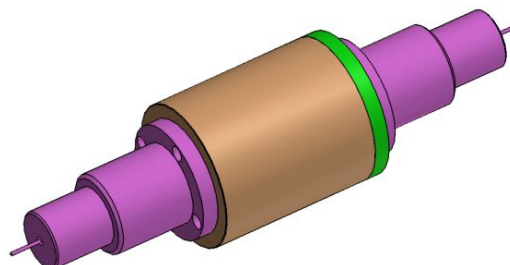
The high power isolator series includes in-line type, beam expanded isolator, fiber in and free space out isolator and free space isolator etc., They're characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. They are ideal for fiber laser and instrumentation applications.

Key Features

- * High isolation and low insertion loss
- * PM and Non-PM are available
- * Excellent environmental stability and reliability
- * Fiber can be customized

Applications

- * Fiber laser
- * Fiber lensor



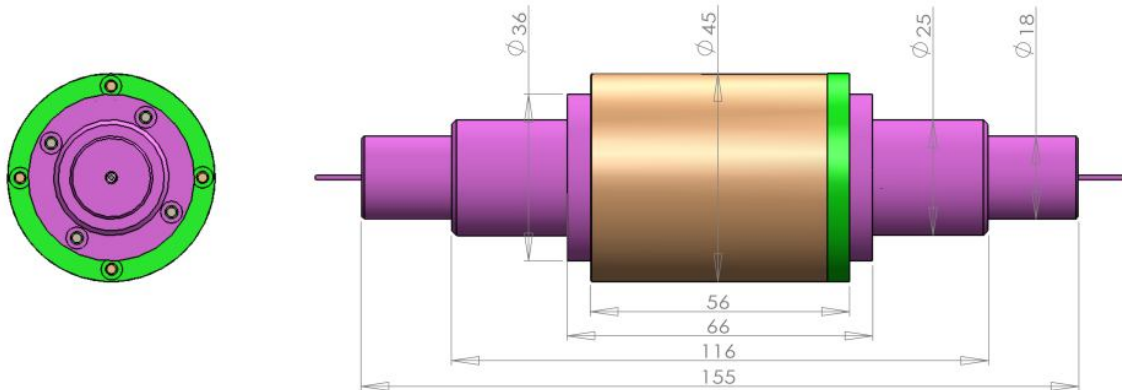
HP(M)IIT

Specifications

Parameter		High power in-line isolator, HP(M)IIT	
		Non-PM isolator	PM isolator
Operating wavelength(nm)	Type	1064±5	
Peak isolation (dB)		35	
Isolation in band at 23℃(dB)		≥28	
Insertion loss at 23℃(dB)		≤1.2	
Polarization dependent loss (dB)		≤0.15	/
Extinction ratio (dB)		/	≥18 (Type B) , ≥20 (Type F)
Return loss (dB)		≥50	
Fiber type (can be customized)		HI1060, x/125, x/250, etc. (x=10um, 15um, 20um, 30um,etc.)	PM980, PM x/125, x/250, etc. (x=10um,15um,20um,30um,etc.)
Input max. power handling	Average (W)	2~20, higher on demand	
	Pulse peak(KW)	10, higher on demand	
Operating temperature (℃)		-5 ~ +50	
Storage temperature (℃)		-20 ~ +70	
Dimensions (Φ x L mm)		Φ 45 x L155	

- * Both single cladding fiber (SCF) and double cladding fiber (DCF) are available.
- * Type B: Both axis working, Type F: Fast axis blocked.
- * Backward power<10% input power
- * Dimension can be made on customer request
- * Insertion loss of light through fiber cladding is not included in the Insertion loss specification.

Mechanical Dimensions (Unit: mm)



Ordering Information

HP(M)IIT-XXXX-X-X-X(XX)- X -XX*XX- X

- Fiber length
- Package size: $\varnothing 45 \times L155\text{mm}$
- Average power handling: 1=1W, 2=2W, 5=5W, 10=10W, 20=20W etc.
- Power condition: C=Continue wave, P(10)=Pulse peak power(10KW),etc.
- Fiber type: Fiber code
- Pigtail diameter: 0=bare fiber
- Operating wavelength: 1064nm etc.
- HPMIIT(PM type), HPIIT(Non-PM type)

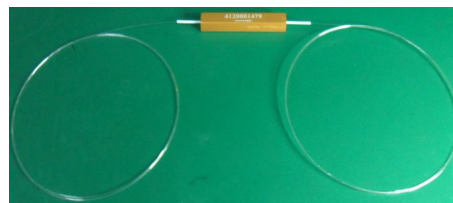
500mW 1064nm In-line Isolator

Description

The 500mW 1064nm in-line isolator is characterized with low cost and compact size. Lightcomm developed a kind of effective heat dissipation technique that the isolator temperature will be fall down. It is characterized with low insertion loss, high isolation, high power handling, high return loss, excellent environmental stability and reliability. It is ideal for fiber laser and instrumentation applications.

Key Features

- * High isolation and low insertion loss
- * PM and Non-PM are available
- * Excellent environmental stability and reliability
- * Customized fiber type available



Applications

- * Fiber laser
- * Fiber sensor

Specifications

Parameter		Type	Non-PM isolator		PM isolator	
			Single stage			
Operating wavelength(nm)			1064±5	1075±5	1080±5	
Typ. peak isolation(dB)			38			
Isolation in band at 23℃(dB)			≥30			
Insertion loss at 23℃(dB) (Input 1mw power)			≤2.0	≤1.8	≤1.6	
Insertion loss at 23℃(dB) (Input max. power)			≤2.2	≤2.0	≤1.8	
Polarization dependent loss(For Non -PM)(dB)			≤0.15		/	
Extinction ratio(For PM) (dB)*			/		≥18 (Type B) , ≥20 (Type F)	
Return loss (Input/Output) (dB)			≥50			
Fiber type			HI1060(Non-PM) or SM98-PS-U25A(PM)			
Input max. power handling	Average (mW)		500		300	
	Pulse peak(W)		1000			
Operating temperature (℃)			-5 ~ +50			
Storage temperature (℃)			-20 ~ +70			
Dimensions(mm)			5*5*35			

* Type B: Both axis working, Type F: Fast axis blocked.

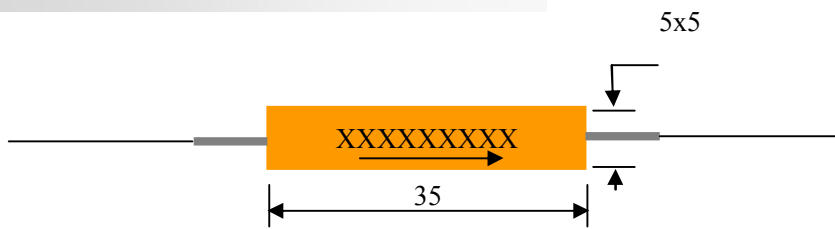
* Backward power<10% input power .

* The dimension would be changed when the fiber type be changed

* Other specifications can be made on customer request

* Insertion loss of light through fiber cladding is not included in the Insertion loss specification.

Mechanical Dimension (Unit: mm)



Ordering Information

HP(M)IIF-XXXX-XXX-X-X-X(X)- X -XX*XX*XX-XX

