

## Polarization Beam Combiner(Splitter)/Isolator Hybrid

### FEATURES

- High Isolation
- Low Insertion Loss
- Epoxy-Free Optical Path
- High Reliability and Stability
- Low Profile Packaging

### APPLICATIONS

- Fiber Optic Amplifiers
- Fiber Optic Instruments
- WDM Systems
- Transmitters and Fiber Lasers
- CATV Networks



### SPECIFICATIONS

Parameter	Unit	Single Stage	Dual Stage	
Center Wavelength ( $\lambda_c$ )	nm	1310, 1480, 1550, 1590		
Peak Isolation (Typ.)	dB	42	58	
Isolation ( $\lambda_c \pm 15\text{nm}$ , 23°C)	dB	$\geq 32$	$\geq 45$	
Insertion Loss ( $\lambda_c$ , 23°C)	dB	$\leq 0.5$	$\leq 0.6$	
Insertion Loss ( $\lambda_c \pm 20\text{nm}$ , 0-70°C)	dB	$\leq 0.7$	$\leq 0.9$	
Optical Return Loss (Input/Output)	dB	55/50	55/50	
Extinction Ratio (for FHIS)	dB	$\geq 20$		
Fiber Type of Port 3	S Type	-	Corresponding SM Fiber	
	P Type	-	Same Fiber to Port1&2, Slow axis align to Port 1	
	Q Type	-	Same Fiber to Port1&2, Slow axis is 45° to Port 1	
Fiber Type of Port 1 & Port 2	-	PM1310/1550 Panda Fiber, 10/125um PMDC Fiber (O) 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q) 25/250um PMDC Fiber (R), 25/300um PMDC Fiber (G)		
Fiber Tensile Load	N	5		
Maximum Optical Power (CW)	mW	300		
Operating Temperature	°C	0~70		
Storage Temperature	°C	-40~85		
Package Dimension	Stainless Steel Tube (SST)	mm	$(\varnothing)5.5 \times 35$	
	Metal Box	mm	(L)120x(W)12x(H)10	

- Note:**
- Specifications are for device without connectors; Specifications may change without notice.
  - To add connectors, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
  - Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.

### ORDERING INFORMATION (PN) FHIC=PBC/Isolator Hybrid; FHIS=PBS/Isolator Hybrid.

FHIC FHIS	-NNNN	- C	C	-(C)	C	C	NN	- CC/CCC
	Center Wavelength	Stage	3rd Port Fiber	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type
	1310-1310nm	S=Single Stage	S=S Type	M=Metal Box	2-PM1310/1550 Fiber	B=Bare Fiber	05=0.5m	N=Without Connector
	1550-1550nm	D=Dual Stage	P=P Type	Blank for SST	0=10/125 PMDC Fiber	L=Loose Tube	10=1.0m	FC/APC=FC/APC Connector
	1480-1480nm		Q=Q Type		T=12/130 PMDC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector
	1590-1590nm				R=25/250 PMDC Fiber	3=3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector