

Isolator Polarization Beam Combiner/Splitter (IPBC/IPBS Series)

Rev 11

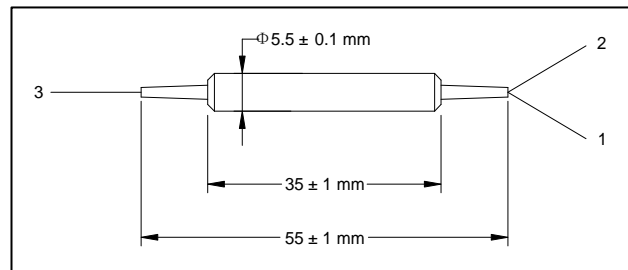
The Isolator Polarization Beam Combiner/Splitter is a compact device which provides both polarization beam combining and optical isolation in one integrated component. The most common application is to combine the light of two pump lasers into one single fiber to double the pump power in EDFA or Raman Amplifier. IPBC/IPBS has extremely low insertion loss, and it can improve the amplifier performance.

Specifications

Parameter	Unit	Single stage	Dual stage
Center Wavelength (λ_c)	nm	1310, 1480 or 1550	
Operating Wavelength Range	nm	$\lambda_c \pm 20$	
Typ. Insertion loss	dB	0.45	0.55
Max. Insertion loss	dB	0.7	0.8
Min. Isolation	dB	20	42
Min. Extinction Ratio (for splitter only)	dB	20	20
Min. Return Loss	dB	50	
Directivity	dB	50	
Max. Optical Power (Continuous Wave)	mW	500	
Fiber Type		PM Panda fiber for Ports 1 & 2, SMF-28 or PM Panda fiber for Port 3	
Max. Tensile Load	N	5	
Operating Temperature	°C	-5 to +70	
Storage Temperature	°C	-40 to +85	

*IL is 0.3 dB higher, RL is 5 dB lower, and ER is 2 dB lower for each connector added. Connector key is aligned to slow axis.

Package Dimensions



Ordering Information

IPBC-①-②②-③-④-⑤-⑥

IPBS-①-②②-③-④-⑤-⑥

①: Stage	②②: Wavelength	③: Connector Type	④: Fiber Jacket
1 - Single stage	31 - 1310 nm	1 - FC/UPC	B - 250 μ m Panda fiber
2 - Dual stage	48 - 1480 nm	2 - FC/APC	L - 900 μ m loose tube
	55 - 1550 nm	3 - SC/UPC	S - Specify
	SS - Specify	4 - SC/APC	
		N - None	
		S - Specify	
⑤: Fiber Type for Port 3			⑥: Fiber Length
1 - SMF-28 fiber			Q - 0.75 m
2 - Slow axis aligned 45° to Port 1			S - Specify
3 - Slow axis aligned to port 1			
S - Specify			