# 780~850nm Polarization Beam Combiner/Splitter (PBC/PBS)

### **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**
- **Dispersion Compensation**
- Light Routing



### **SPECIFICATIONS**

Parameter			Unit	Value		
Center Wavelength			nm	780, 793, 808	830, 850	
Bandwidth			nm	+/-10		
Insertion Loss		(Typ.)	dB	0.9	0.8	
Insertion Loss		(Max.)	dB	1.5	1.3	
Directivity		dB	≥50			
Optical Return Loss		dB	≥45			
Futination Datia (four		(Typ.)	dB	23		
Extinction Ratio (for	-PBS) —	(Min.)	dB	20		
Fiber Type of Port 1 & Port 2			-	PM850 Fiber or PM780-HP Fiber		
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		
Direction of Incident Polarization			-	Slow Axis		
Fiber Tensile Load			N	5		
Max. Optical Power (CW)			mW	300		
Operating Temperature			°C	0~50		
Storage Temperature			°C	-40~85		
Package Dimension	Stainless Steel Tube (SST)		mm	(Ø)5.5x35 (≤5W); (Ø)6.0x48 (5~10W)		
	Metal Box		mm	(L)90x(W)12x(H)10 (>10W); (L)120x(W)12x(H)10 (≤10W)		

Note: 1. Specifications are for device without connectors; Specifications may change without notice.

2. To add connectors, IL is 0.7dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.

3. 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) FPBC=Polarization Beam Combiner; FPBS=Polarization Beam Splitter.

FPBC FPBS	- NNNN Center Wavelength	- C 3rd Port Fiber	- ( <mark>C</mark> ) Package	<b>C</b> Fiber Type	<b>C</b> Fiber Sleeve	NN Fiber Length	- CC/CCC Connector Type
	780=780nm	S=S Type	M=Metal Box	2=PM850 Fiber	B= Bare fiber	<mark>05=</mark> 0.5m	N=Without Connector
	<b>793=</b> 793nm	P=P Type	<i>Blank</i> for SST	7=PM780HP Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
	830=830nm	Q=Q Type			2= 2mm Cable	15=1.5m	LC/PC=LC/PC Connector
	850=850nm				3= 3mm Cable	<mark>20=</mark> 2.0m	SC/UPC=SC/UPC Connector



