

Polarization Beam Combiner/Splitter for Pulse Power

FEATURES

- High Isolation
- Low Insertion Loss
- High Reliability and Stability
- Various Bandwidth
- High Optical Power

APPLICATIONS

- Broadband Systems
- Optical Amplifying Systems
- Telecommunication Networks
- Research Labs
- Laser Systems



SPECIFICATIONS

Parameter	Unit	Value
Center Wavelength	nm	1310, 1480, 1550, 1590
Bandwidth	nm	+/-40
Insertion Loss	(Typ.)	0.5
	(Max.)	0.7
Directivity	dB	≥50
Optical Return Loss	dB	≥45
Extinction Ratio (for FPBS)	(Typ.)	22
	(Min.)	18
Fiber Type of Port 1 & Port 2	-	PM1310/1550 Panda Fiber or 10/125um PMDC Fiber (O) 12/130um PMDC Fiber (T), 20/130um PMDC Fiber (Q) 25/250um PMDC Fiber (R) or 25/300um PMDC Fiber (G)
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. Average Optical Power	W	0.3, 0.5, 1, 2, 3, 5, 10, 15, 20, 25, 30, 40, 50, 60
Max. Peak Power for Pulse	kW	0.1, 1, 2, 3, 5, 10, 15, 20
Operating Temperature	°C	0~70
Storage Temperature	°C	-40~85
Package Dimension	Stainless Steel Tube (SST)	mm $\varnothing 5.5 \times L 38$ ($\leq 5W$); $\varnothing 6.0 \times L 50$ ($5 \sim 10W$)
	Metal Box	mm $L 90 \times W 12 \times H 10$ ($> 10W$); $L 120 \times W 12 \times H 10$ ($\leq 10W$)

- 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.
 - Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
 - 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.
 - Package size may be different for different optical power and fiber type.

ORDERING INFORMATION (PN) FPBC=Polarization Beam Combiner; FPBS=Polarization Beam Splitter.

FPBC FPBS	NNNN	- C	H	NN	P	NN	-(C)	C	C	NN	- CC/CCC
	Center Wavelength	3rd Port Fiber		Average Power	Peak Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type	
	1310~1310nm	S-S Type		03~300mW	01~100W	M-Metal Box	2-PM1310/1550Fiber	B- Bare fiber	05~0.5m	N-Without Connector	
	1480~1480nm	P-P Type		1~1W	1~1kW	Blank for SST	0~10/125 PMDC Fiber	L- Loose Tube	10~1.0m	FC/APC-FC/APC Connector	
	1550~1550nm	Q-Q Type		5~5W	5~5kW	or >10W	1~12/130 PMDC Fiber	2- 2mm Cable	15~1.5m	LC/PC-LC/PC Connector	
	1590~1590nm			10~10W	10~10kW		6~25/300 PMDC Fiber	3- 3mm Cable	20~2.0m	SC/UPC-SC/UPC Connector	