

Polarization Beam Combiner

POLA-MUX®

Features

- ✧ Low Insertion loss
- ✧ High combining efficiency

- ✧ Telcordia GR-1221-CORE and GR-1209-CORE qualified

Application

- ✧ Pump LDs combining in EDFA and PM EDFA
- ✧ Raman LDs combining in Raman Amp.



PBC for EDF AMP.

Item		1480nm region		980nm region	
Insertion Loss ⁽¹⁾ (dB) Maximum	Axis	±10nm	±20nm	±5nm	±10nm
	SLOW	0.4	0.4	0.3	0.3
	FAST	0.8	1.1	0.7	0.8
	FAST Av. (information only)	(0.5)	(0.6)	(0.45)	(0.5)
Return loss ⁽²⁾		≥50dB		≥43dB	
Max Power handling		1W		1W	
Operating Temperature		0 to 70°C		0 to 70°C	
Storage Temperature		-40 to 85°C		-40 to 85°C	
Configuration		2x2 or with termination fiber		2x2 or with termination fiber	
Fiber Type (input & output)		Fujikura PANDA fibre for 1550nm		Fujikura PANDA fibre for 980nm	
Standard Lead Fiber length		1m		1m	
Main Body size		φ 3.0mm L 65mm		φ 3.0mm L 65mm	

1. Measured at room temperature
2. Measured with 2 x 2 configuration with termination fiber spliced on P3

PBC for Raman Amp.

Parameter	Unit	
Center Wavelength Range ⁽¹⁾	nm	1420 to 1510
Operating Wavelength Range	nm	+/-2
Insertion Loss (Fast axis) ⁽²⁾	Typ.	0.3
	Max.	0.5
Insertion Loss (Slow axis) ⁽²⁾	Typ.	0.2
	Max.	0.4
Port Configuration		2 x 2
Return Loss ⁽³⁾	Min.	55
Directivity	Min.	55
Crosstalk ⁽²⁾	Typ.	-20
	Max.	-17
Temperature Dependent Loss	Typ.	0.1
Fiber type		Fujikura PANDA fiber (250μm)
Fiber Length (standard)	m	> 1
Package Dimensions (dia. X L)	mm	3.0(dia.)x 65(L)
Operating Temperature	degC	0 to 70
Storage Temperature	degC	-40 to 85

1. Center wavelength of PBC can be customized for different applications
2. Measured at room temperature
3. Measured with 2 x 2 configuration with termination fiber spliced on P3

POLA-MUX for Raman Amp.

