

## 4-port PM Optical Circulator for Pulse Power

### 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	1310, 1480, 1550, 1590	
Operating Wavelength Range	nm	+/-20	
Optical Path	-	1→2, 2→3, 3→4, 4→1	
Insertion Loss	(Typ.)	dB	0.8
	(Max.)	dB	1.2
	(Peak.)	dB	40
Isolation	(Typ.)	dB	30
	(Min.)	dB	20
Cross Talk (1→3, 2→4)	dB	≥50	
Optical Return Loss	dB	≥55	
Extinction Ratio (Min.)	dB	18	
Polarization Alignment	-	Slow Axis	
Fiber Type	-	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	
Max. Average Optical Power	W	0.3, 0.5, 1, 2, 3, 5, 10	
Max. Peak Power for pulse	kW	0.1, 1, 2, 3, 5, 10, 15, 20	
Operating Temperature	°C	0~50	
Storage Temperature	°C	-40~85	
Package Dimension	Stainless Steel Tube (SST)	mm	∅5.5x <sup>L</sup> 35 (≤5W); ∅6.0x <sup>L</sup> 50 (5~10W)
	Metal Box	mm	<sup>L</sup> 120x <sup>W</sup> 12x <sup>H</sup> 10

- Note:**
1. Specifications are for device without connectors; Specifications may change without notice.
  2. To add connectors, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.
  3. The devices can only work in slow axis and fast axis is blocked.
  4. Only guarantee 1W continuous wave (CW) power thru testing for connectors added.
  5. 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)

FPCR-	NNNN	- 4H NN	P NN	-(C)	C	C	NN	-CC/CCC
Center Wavelength	Average Power	Peak Power	Package	Fiber Type	Fiber Sleeve	Fiber Length	Connector Type	
1310	1310nm	03=300mW	01=100W	M=Metal Box	2=PM1310/1550 Fiber	B= Bare Fiber	05=0.5m	N=Without Connector
1550	1550nm	1= 1W	1= 1kW	Blank for SST	0=10/125 PMDC Fiber	L= Loose Tube	10=1.0m	FC/APC=FC/APC Connector
1480	1480nm	5=5W	10=10kW		T=12/130 PMDC Fiber	2=2mm Cable	15=1.5m	LC/PC=LC/PC Connector
1590	1590nm	10=10W	20=20kW		R=25/250 PMDC Fiber	3=3mm Cable	20=2.0m	SC/UPC=SC/UPC Connector