

## Polarization Insensitive Optical Circulator

**Features:**

High isolation & High Return Loss  
 Low insertion loss & PDL  
 Optical Path Epoxy Free

**Application:**

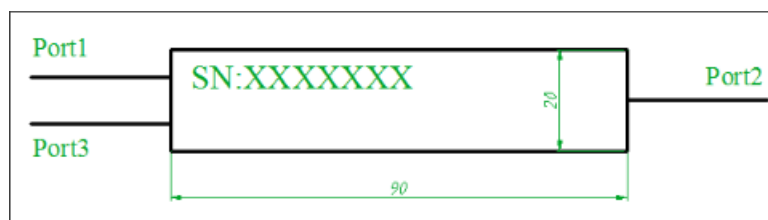
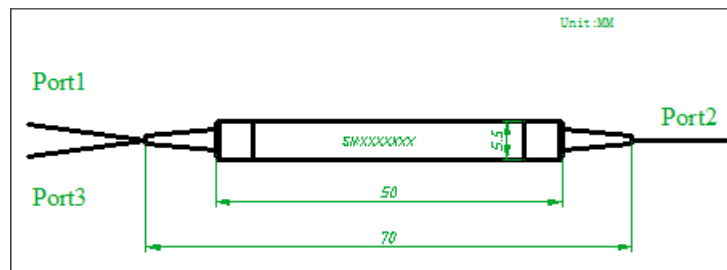
EDFA, DWDM and OTDR  
 DWDM and OADM networks  
 Bi-directional transmission system

**Specifications:**

Parameter	Type	3 Port		4 Port	
		Port 1 to Port 2; Port 2 to Port 3		Port 1 to Port 2; Port 2 to Port 3; Port 3 to Port 4	
Configuration		Port 1 to Port 2; Port 2 to Port 3		Port 1 to Port 2; Port 2 to Port 3; Port 3 to Port 4	
Operating wavelength (nm)		1310, 1480, 1550, 1580 (+/-30)	C+L (1520~1620)	1310, 1480, 1550, 1580 (+/-30)	C+L (1520~1620)
Typ. Peak Isolation		50	50	50	50
Isolation ( $\lambda$ , 23°C all SOP) (dB)		$\geq 40$	$\geq 40$	$\geq 40$	$\geq 40$
Isolation (Over all $\lambda$ , T, SOP) (dB)		$\geq 35$	$\geq 30$	$\geq 35$	$\geq 30$
Insertion Loss ( $\lambda$ , 0~70°C all SOP) (dB)	Grade P	$\leq 0.8$	$\leq 1.1$	$\leq 1.0$	$\leq 1.2$
	Grade A	$\leq 1.0$	$\leq 1.2$	$\leq 1.2$	$\leq 1.3$
PDL (dB)		$\leq 0.15$		$\leq 0.20$	
Return loss (dB)		$\geq 50$			
PMD (ps)		$\leq 0.1$			
Directivity		$\geq 50$			
Power handling (mW)		$\leq 500$			
Fiber Type		SMF-28e			
Operating temperature (°C)		0 ~ +70			
Storage temperature (°C)		-40 ~ +85			
Package Dimensions (mm)	For bare fiber or 900um loose tube	$\phi 5.5 \times L50(P1)$		$\phi 5.5 \times L38$	$\phi 5.5 \times L64$
	For 3mm or 2mm cable	L90*W20*H9.5(P2)			

\*Above specifications are for devices without the connectors.

\*For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower

**Packing Dimensions:**


**Ordering Information:**

FCIR	wavelength	Type	Grade	0	Package	Pigtail Type	Length	Connector
FCIR	1310=1310nm 1480=1480nm 1550=1550nm 1580=1580nm CL00=1520~1620nm	3=3Port 4=4Port	P=P Grade A= A Grade	0	1=P1(5.5*50mm) 2=P2(90*20*9.5mm) 3=P3(4.7*43 ± 1mm) 4=P4(4.9*43 ± 1mm)	1=250um bare fiber 2=900um loose tube 3=3mm loose tube 4=2mm loose tube S=Specify	H=0.5m 8=0.8m 1=1.0m 5=1.5m 2=2.0m 3=3.0m 4=4.0m A=2.5m B=5.0m S=Specify	0=None 1=FC/UPC 2=FC/APC 3=SC/APC 4=SC/UPC 5=MU 6=LC/UPC 7=LC/APC S=Specify