1x4 Solid-State Bi-direction Fiberoptic Switch

AC Photonics' SW Series switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved using patent pending ono-mechanical proprietary configurations and activated via an electrical control signal. The Solid-state operation offers ultra-high reliability and fast switching speed as well as bi-directional performance. The SW fiberoptic switches are true switching solution for optical networking applications.

Features

- Fast Switching Speed
- Ultra-High Reliability
- Latching
- Bi-Directional Operation
- High Repeatability
- Low Cost

Applications

- Optical Signal Routing
- Optical Network Protection/Restoration
- Configurable Optical Add/Drop
- Transmitter and Receiver Protection
- Network Test Systems
- Instrumentation

Performance Specifications

Parameter	Specification
Operating Wavelength (nm)	1550±30, 1310±30 or customer wavelength
Insertion Loss (dB)	1.7(Max); 1.2(Typ.)
PDL (dB)	≤0.1
Polarization Mode Dispersion (ps)	≤0.1
Cross Talk (dB)	≥35, 50(Typ.)
Return Loss (dB)	≥55
Switching Speed (us)	200 (Max); 50 (Typ.)
Durability(Cycle)	1 billion
Drive Voltage (V)	3.0
Operating Temperature(°C)	0~+70
Dimensions (mm)	53.5x38.3x8.5

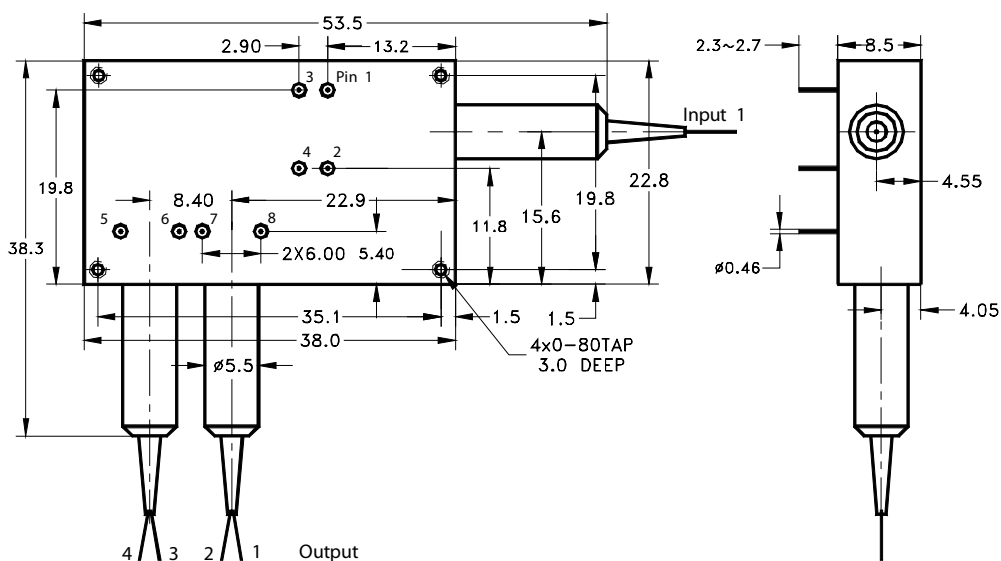Specifications may change without notice.
Switching Speed<0.2ms

Ordering Information

SWB								
	Operating Wavelength		Port	Pigtail Style	Fiber Length	In/Out Connector		
	15=1550 13=1310		0104=1x4	1=Bare Fiber 2=900um Jacket	1=1m 2=2m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC		

Dimensions (mm)

Electric Configuration

Optical Path	Pin Group1		Pin Group2		Pin Group3		Pin Group4	
	1	2	3	4	5	6	7	8
Input - Output 1	+	-	+	-	-	+	+	-
Input - Output 2-		+	-	+	-	+	+	-
Input - Output 3	+	-	-	+	+	-	-	+
Input - Output 4-		+	+	-	+	-	-	+

"+": 2.5~3.0V Pulse; "-": Ground.

Parameter	Minimum	Typical	Maximum	Unit
Resistance (each group)	15	18	22	Ω
Switch Voltage	2.5		3	V
Pulse Duration	0.1	0.2	2	ms