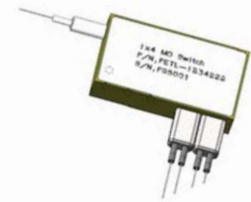


Mini 1x4 Solid-State PM Fibreroptic Switch

ACP's SW Series switch connects optical channels by redirecting an incoming optical signal into a selected output fiber. This is achieved using patent pending non-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 fibreroptic switches are true switching solutions for optical networking applications.



PERFORMANCE SPECIFICATIONS

Parameter	Specifications	
Port Configuration	Unidirectional	Bidirectional
Operating Wavelength	1525 ~ 1565 or Custom Wavelengths	
Insertion Loss	≤ 1.5dB	≤ 1.8dB
Wavelength Dependent Loss (WDL)	≤ 0.30dB	≤ 0.30dB
Temperature Dependent Loss (TDL)	≤ 0.30dB	≤ 0.30dB
Channel Crosstalk	≥ 30dB	≥ 30dB
Return Loss	≥ 40dB	≥ 30dB
Polarization Extinction Ratio (PER)	≥ 18dB	
Repeatability	± 0.01dB	
Switching Speed (Regular)	50 ~ 200us	
Switching Speed (Ultra-fast)	2 ~ 20us	
Durability (Cycles) (Regular)	≥ 100 Billion	
Durability (Cycles) (Ultra-fast)	≥ 1,000 Billion	
Optical Power	≤ 500 mW	
Operating Temperature	-5 to +70°C	
Storage Temperature	- 40 to +85°C	
Package Dimensions (LxWxH)	37x16x7.5	

All values referenced are without connector.

FEATURES

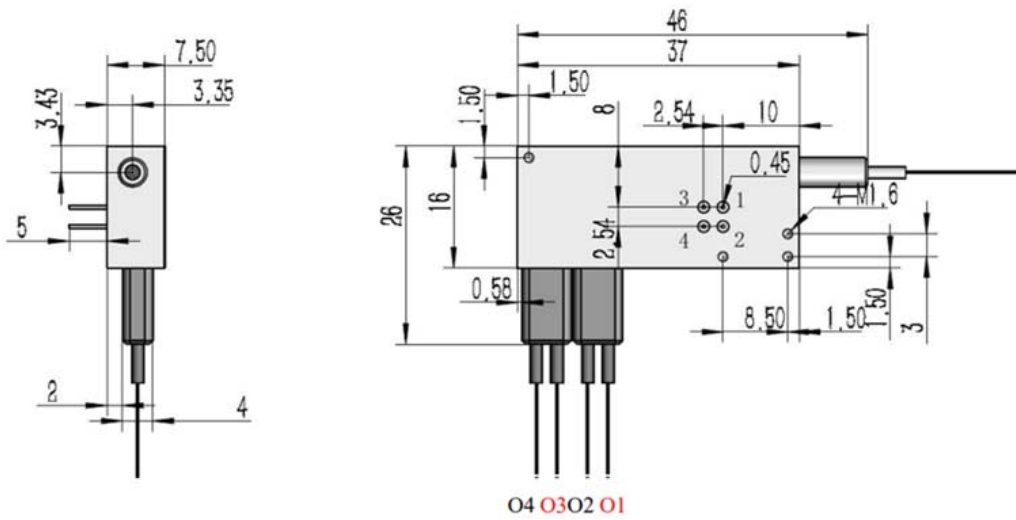
- Fast Switching Speed
- Ultra-High Reliability
- Latching
- Highly Repeatability
- Low Cost

APPLICATION

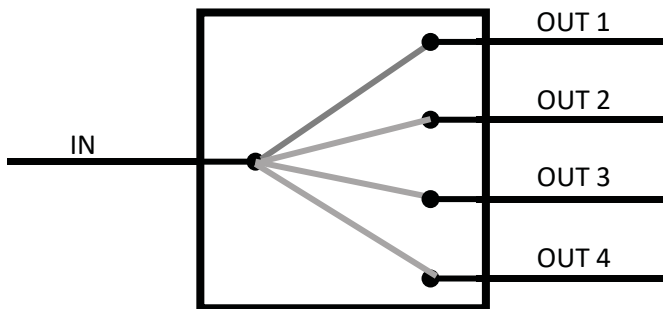
- Optical Network Protection/ Restoration
- Optical Signal Routing
- Configurable Optical Add/Drop
- Transmitter & Receiver Protection
- Network Test Systems
- Instrumentation

Mini 1x4 Solid-State PM Fiberoptic Switch

MECHANICAL DIMENSIONS



PORT CONFIGURATIONS



Mini 1x4 Solid-State PM Fiberoptic Switch

OPTICAL PATH AND ELECTRICAL PIN CONFIGURATION

Unidirectional Configuration				
Optical Path	Pin 1	Pin 2	Pin 3	Pin 4
IN → OUT 1	+	-	+	-
IN → OUT 2	-	+	-	+
IN → OUT 3	+	-	-	+
IN → OUT 4	-	+	+	-

Bidirectional Configuration				
Optical Path	Pin 1	Pin 2	Pin 3	Pin 4
IN ↔ OUT 1	+	-	+	-
IN ↔ OUT 2	-	+	-	+
IN ↔ OUT 3	+	-	-	+
IN ↔ OUT 4	-	+	+	-

ELECTRICAL SPECIFICATIONS

Parameters	Unit	Specifications	
		Regular	Ultra-fast
Switching Speed *	us	50 ~ 200	2 ~ 20 (Typ. :5)
Switching Voltage (Vcc)	V	3 ± 5%	3 ~ 7.5
Switching Current	mA	≤ 100	≤ 350
Driving Mode		Voltage or Pulse Driving	Pulse Driving
Pulse Width (Typical)	us	≤ 500 (Typ. : 300)	≤ 200
Claim Frequency	Hz	≤ 1,000	≤ 3,500

* Other switching speed is also available upon request.

ORDERING INFORMATION

Configuration	Switching Speed	Operating Wavelength	Port	Package	Fiber Type	Pigtail Style*	Fiber Length	In Connector	Out Connector	Working axis
U=Unidirectional	1=50 ~ 200us	55=1525 ~ 1565nm	104=1x4	A=A Package	M=PM1310	1=Bare fiber	07=0.75m	0=None	0=None	S=Slow axis
B=Bidirectional	2=2 ~ 20us	SS=Specify			N=PM1550	2=900um loose tube	10=1.0m	1=FC/APC	1=FC/APC	B=Both axis
								2=FC/PC	2=FC/PC	F=Fast axis
								3=SC/APC	3=SC/APC	
								4=SC/PC	4=SC/PC	
								5=ST	5=ST	
								6=LC/UPC	6=LC/UPC	
								7=LC/APC	7=LC/APC	

* Other length is available upon request, However, 900µm loose tube is only up to 2m.