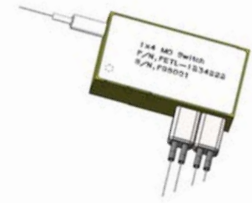


1x4 Solid-State PM Fibreroptic Switch

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	≥ 40dB	≥ 30dB
Return Loss	≥ 30dB	≥ 30dB
Extinction Ratio (ER)	≥ 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)	37x21x7.5	

All values referenced are without connector.

FEATURES

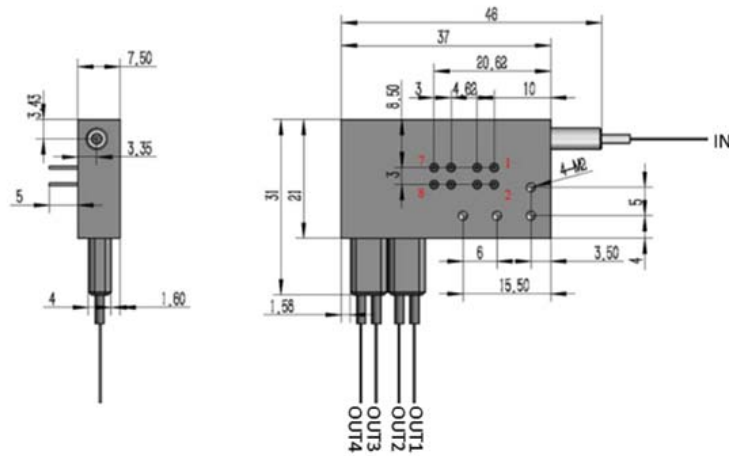
- Fast Switching Speed
- Ultra-High Reliability
- Latching
- Highly Repeatability
- Low Cost

APPLICATION

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

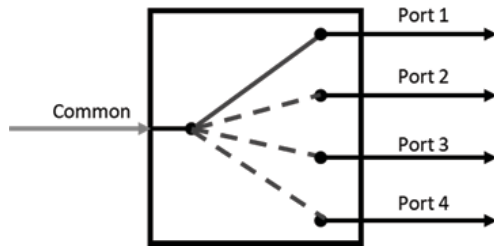
1x4 Solid-State PM Fiberoptic Switch

MECHANICAL DIMENSIONS

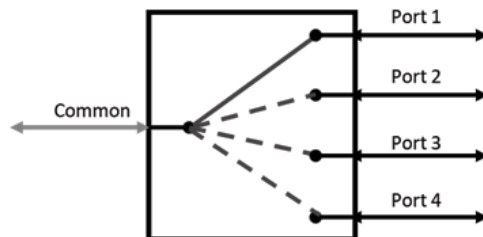


PORT CONFIGURATIONS

Unidirectional



Bidirectional



1x4 Solid-State PM Fiberoptic Switch

OPTICAL PATH AND ELECTRICAL PIN CONFIGURATION

Unidirectional Configuration								
Optical Path	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
IN → OUT 1	+	-	+	-	N/A	N/A	N/A	N/A
IN → OUT 2	-	+	-	+	N/A	N/A	N/A	N/A
IN → OUT 3	+	-	-	+	N/A	N/A	N/A	N/A
IN → OUT 4	-	+	+	-	N/A	N/A	N/A	N/A

Bidirectional Configuration								
Optical Path	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
IN ↔ OUT 1	+	-	+	-	N/A	N/A	N/A	N/A
IN ↔ OUT 2	-	+	-	+	N/A	N/A	N/A	N/A
IN ↔ OUT 3	+	-	-	+	N/A	N/A	N/A	N/A
IN ↔ OUT 4	-	+	+	-	N/A	N/A	N/A	N/A

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)	≤ 20
Claim Frequency	Hz	≤ 1,000	≤ 3,500

* Other switching speed is also available upon request.

ORDERING INFORMATION

Configuration	Switching Speed	Operating Wavelength	Port	Fiber Type	Pigtail Style	Fiber Length	In Connector	Out Connector	Working axis
U=Unidirectional	1=50 ~ 200us	55=1525 ~ 1565nm	104=1x4	M=PM1310	1=Bare fiber	07=0.75m	0= None	0= None	S=Slow axis
B=Bidirectional	2=2 ~ 20us	Custom		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	