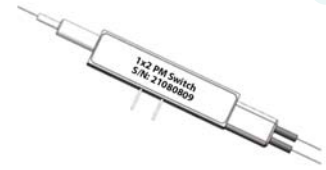


1x2 Solid-State PM FIBER OPTIC SWITCH



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 fiberoptic 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	≤ 1.1dB
Wavelength Dependent Loss (WDL)	≤ 0.30dB
Temperature Dependent Loss (TDL)	≤ 0.30dB
Channel Crosstalk	≥ 40dB
Return Loss	≥ 40dB
Extinction Ratio (ER)	≥ 18dB
Repeatability	± 0.01dB
Switching Speed (Regular)	50 ~ 200us
Switching Speed (Ultra-fast)	5 ~ 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)	32.8x8.0x7.0mm (Including end cap 51.8x8.0x7.0mm)

All values referenced are without connector.

FEATURES

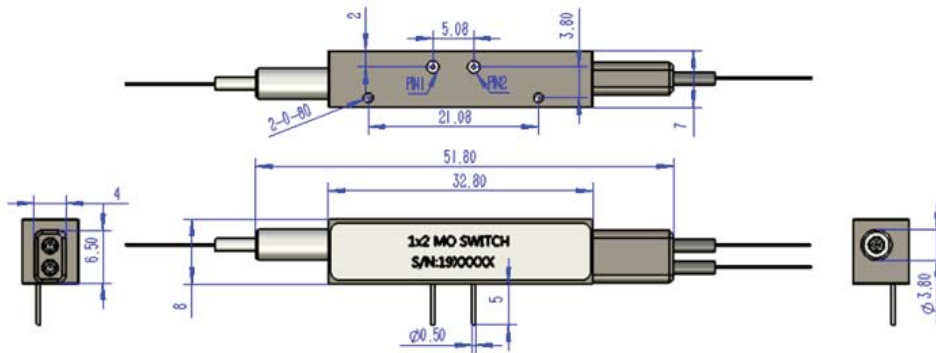
- Fast Switching Speed
- Ultra-High Reliability
- Latching
- Highly Repeatability
- Low Cost

APPLICATION

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

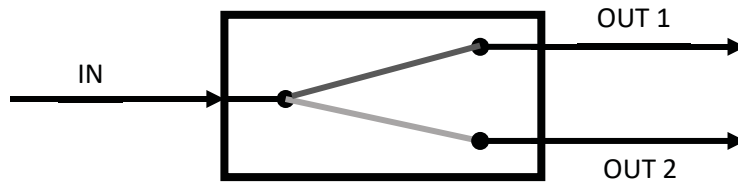
1x2 Solid-State PM Fibreroptic Switch

MECHANICAL DIMENSIONS

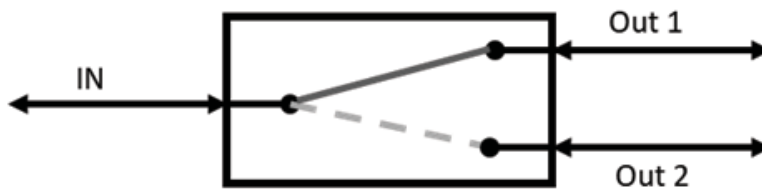


PORT CONFIGURATIONS

Unidirectional



Bidirectional



1x2 Solid-State PM Fiberoptic Switch

OPTICAL PATH AND ELECTRICAL PIN CONFIGURATION

Unidirectional Configuration		
Pin 1	Pin 2	Optical Path
1 (Voltage = Vcc)	0 (Voltage = GND)	IN → OUT 1
0 (Voltage = GND)	1 (Voltage = Vcc)	IN → OUT 2

Bidirectional Configuration		
Pin 1	Pin 2	Optical Path
1 (Voltage = Vcc)	0 (Voltage = GND)	IN ↔ OUT 1
0 (Voltage = GND)	1 (Voltage = Vcc)	IN ↔ OUT 2

ELECTRICAL SPECIFICATIONS

Parameters	Unit	Specifications	
		Regular	Ultra-fast
Switching Speed	us	50 ~ 200	5 ~ 20
Switching Voltage (Vcc)	V	3 ± 5%	5 ~ 6
Switching Current	mA	≤ 100	≤ 350*
Pulse Width (Typical)	us	1,000	20
Claim Frequency	Hz	≤ 800	≤ 3,000

*To avoid damage for ultra-fast operation please set the current limit below 800mA when the power supply voltage is set to 6 ~ 7V.

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	102=1x2	M=PM1310	1=Bare fiber	07=0.75m	0=None	0=None	S=Slow axis
B=Bidirectional	2=5 ~ 20us	Custom		N=PM1550	2=900um loose tube	10=1.0m	1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/UPC 7=LC/APC	1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=ST 6=LC/UPC 7=LC/APC	B=Both axis F=Fast axis