












Features



-  No moving parts, best durability
-  Ultra fast switching speed
-  Extremely stable latching mode
-  Low power consumption
-  Easy to route -all fibers on same side
-  Exceptional reliability and stability



Applications

-  Optical switching
-  High speed protection
-  System monitoring
-  Test & measurement
-  Fiber-optics sensing system

Product Description

-  1x2 or 2x1 optical switch is an all solid-state device without any moving parts. The switching of the optical light is realized by utilizing Faraday Effect.
-  This is achieved using a patent protected non-mechanical configuration with solid-state all-crystal design which eliminates the need for mechanical movement. The microsecond fiber optic switch is designed to meet the most

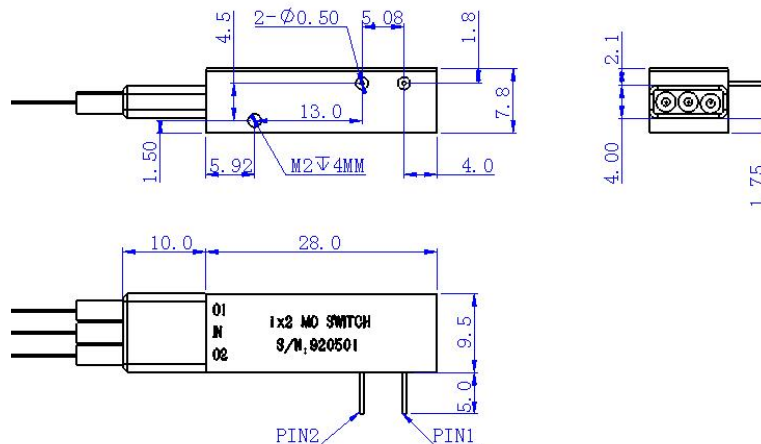
Specifications

Item	Unit	Parameters		Notes
		Unidirectional	Bidirectional	
Wavelength Range	nm	1525~1565		Other band optional
Insertion Loss	dB	0.7(Typ.); 1.1(Max.)	0.8(Typ.); 1.2(Max.)	
PDL	dB	0.1(Typ.); 0.2(Max.)	0.15(Typ.); 0.3(Max.)	
Return Loss	dB	≥40 (Typ ≥50)	≥30 (Typ≥45)	
Cross-talk	dB	≥40 (Typ ≥50)	≥30 (Typ ≥45)	
ER		≥18	≥18	
PMD	ps	0.2	0.3	
Repeatability	dB	+/- 0.01		
Durability	cycles	>100Billions		
Switching Speed	μs	Regular (200~400); Ultra-fast (10~30)		Other speed optional
Storage Temperature	$^{\circ}P$ $^{\circ}C$	-40~85		
Operating Temperature	$^{\circ}P$ $^{\circ}C$	-5~70		
Maximum Optical Power	mW	500		High power optional
Dimension(L×W×H)	mm	28×9.5× 7.8		

Note:

1. All the specifications are based on the devices without connectors, and guaranteed over wavelength, polarization and temperature.
2. Specifications are subject to change without notice.

Dimensions Drawing (mm)



 **Electrical Specifications**

Parameters	Specifications		Unit
	Regular	Ultra-fast	
Switching Speed	200~400	10~30	μs
Switching Voltage (VCC)	5 (+/-5%)	6.0~7.0	V
Switching Current	< 100	< 350	mA
Driving Mode	Voltage or Pulse Driving	Pulse Driving	NA
Pulse Width (typical)	1000	200	μs
Claim Frequency	<800	< 3000	Hz

Note:1. The recommended pulse width < 200us, if the pulse width of 50us is recommended to adjust the voltage to 7v.

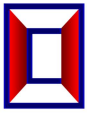
2. When the switch is used for high-frequency switching, it is not recommended to use for a long time, if the need for a long time high-frequency switching, it is recommended to use a cooling device.

 **Unidirectional Pin control signal corresponding to switching status table**

Pin1	Pin2	The Optical Output Port
1(Voltage = VCC)	0(Voltage = GND)	IN → OUT1
0(Voltage = GND)	1(Voltage = VCC)	IN → OUT2
1(Voltage = VCC)	0(Voltage = GND)	OUT2 → IN
0(Voltage = GND)	1(Voltage = VCC)	OUT1 → IN

 **Bidirectional Pin control signal corresponding to switching status table**

Pin1	Pin2	The Optical Output Port
1(Voltage = VCC)	0(Voltage = GND)	IN ↔ OUT1
0(Voltage = GND)	1(Voltage = VCC)	IN ↔ OUT2
1(Voltage = VCC)	0(Voltage = GND)	OUT2 ↔ IN
0(Voltage = GND)	1(Voltage = VCC)	OUT1 ↔ IN



Ordering Information : HC-MO-1×2R-PM-A-B-C-D-E-F-G

A	B	C	D	E	F	G
Working Mode	Switching Speed	Operating Wavelength	Fiber Type	Fiber Tuber	Fiber Length	Connector Type
1. Unidirectional	1.200~400us	1.C Band	1.PM98	1.250μm fiber	1.0.5 +/- 0.1 m	0.No Connector
2. Bidirectional	2.10~30us	2. L Band	2.PM15	2. 900μm fiber	2. 1.0 +/- 0.1 m	1. FC/UPC
	3. Others	3. C & L Band	3.PM13	3. Others	3. Others	2. FC/APC
		4. Others	4.Others			3. SC/UPC
						4. SC/APC
						5. LC/PC
						6. MU/PC
						7. Others