

Mechanical Mini Optical Switch

Features

- ◆ Compact size
- ◆ Low Insertion Loss
- ◆ High Repeatability
- ◆ Latching or Non-latching Configurations
- ◆ Epoxy Free Optical Path
- ◆ Compliance with RoHS

Applications

- ◆ Optical Line Protection
- ◆ Back up Switching
- ◆ Monitoring System
- ◆ OADM
- ◆ Optical Signal Routing


Specification

Parameters	Unit	Optical Switch
Wavelength Range	nm	1310±50 and 1550±50
Test Wavelength	nm	1310 and/or 1550
1X1 Insertion Loss ^{1,2}	dB	≤ 0.6 (typical: 0.3)
1X2 Insertion Loss ^{1,2}	dB	≤ 0.7 (typical: 0.5)
2X2 Bypass Insertion Loss ^{1,2}	dB	≤ 0.8 (typical: 0.5)
Wavelength Dependent Loss	dB	≤0.25
Return Loss ¹	dB	≥ 50 (typical: 55)
Crosstalk	dB	≥ 55(typical: 60)
Polarization Dependent Loss	dB	≤0.05(typical: 0.03)
Temperature Dependent Loss	dB	≤0.2
Repeatability	dB	≤±0.02
Operating Voltage	VDC	5
Durability	Cycles	≥ 10 Million
Switching Time	ms	≤4
Optical Power	mW	≤500
Operating Temperature	°C	-20 ~ +70
Storage Temperature	°C	-40 ~ +85
Relative Humidity	%	≤85
Dimension	mm	(L)18.5×(W)10.5×(H)8.0 ±0.2
Note: ¹ Excluding Connectors.		
² Add 0.2dB for each connector.		

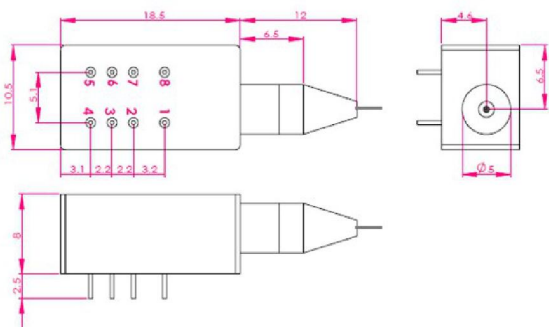
Optical Path

State	1X1	1X2	2X2 Bypass
A	Light close	P1-P3	P4-P3
B	P1-P2	P1-P2	P1-P3, P4-P2

Pin Configuration

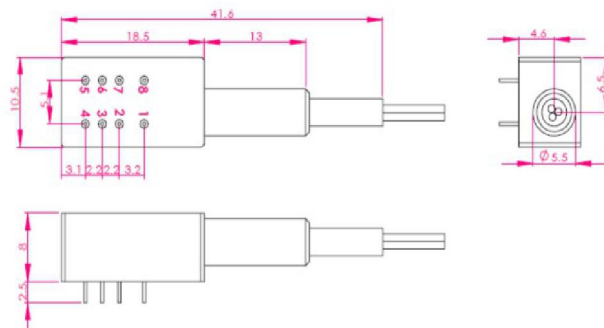
Type	State	Electrical Drive		Status Contacts				Pins
		Pin 1	Pin 8	Pins 2-3	Pins 6-7	Pins 3-4	Pins 5-6	
Latching	A	GND	+5 V	Closed	Closed	Open	Open	 <p>Bottom View</p>
	B	+5 V	GND	Open	Open	Closed	Closed	
Non-latching	A	-	-	Closed	Closed	Open	Open	
	B	+5 V	GND	Open	Open	Closed	Closed	

Device with Bare fiber:



P1: Black P2: White P3: Blue P4: Red

Device with 0.9mm loose tube:



P1: Black P2: White P3: Blue P4: Red

Ordering Information

GLSW	Type	Switching Mode	Wave length	Cable type	Cable length	Connector	
						input	output
GB-Link Optical Switch	101=1x1	L=Latching	13=1310nm	B=250um bare fiber	03=0.3m	0=No connector	
	102=1x2	N=Non-latching	15=1550nm		05=0.5m	1=SC/APC	
	104=1x4			09=0.9mm loose tube	10=1m	2=SC/UPC	
	202=2x2		1315=1310&1550nm		15=1.5m	3=LC/APC	
	202=2X2				20=2m	4=LC/UPC	
	22B=2x2 Bypass					5=FC/APC	
	12D=Dual 1x2					6=FC/UPC	
	22D=Dual 2x2					ST=ST connector	
						MU=MU connector	

F/2,D Building, Fuxin Industrial Area, 3rd Yangxia Street, Shajin Town, Shenzhen, China

Tel:86-755-27683696

Fax:86-755-36652839

[Http://www.GB-Link.com](http://www.GB-Link.com)