

N1x2 NanoSpeed Electro-Optical Switch

Features

- Nanosecond high speed
- High Stability, High Reliability
- Epoxy-free on Optical Path

Applications

- Optical switching
- Fault Protection
- Time Delay measurement
- System monitoring
- Sensing system



Product Description

The N1x2 optical switch is connected to the optical path by connecting or blocking the optical signal. The switch has non-mechanical configurations and activated via an electrical control signal. The switch also has build-in circulator and isolator functions.

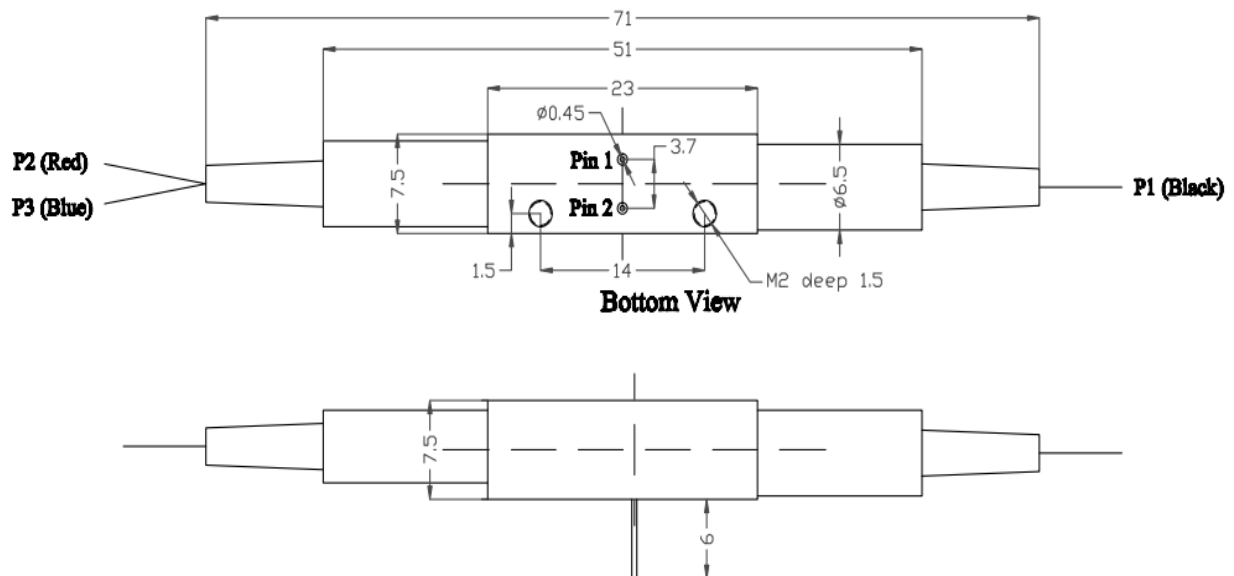
Products are widely used in aerospace and military equipment.

Performance Specifications

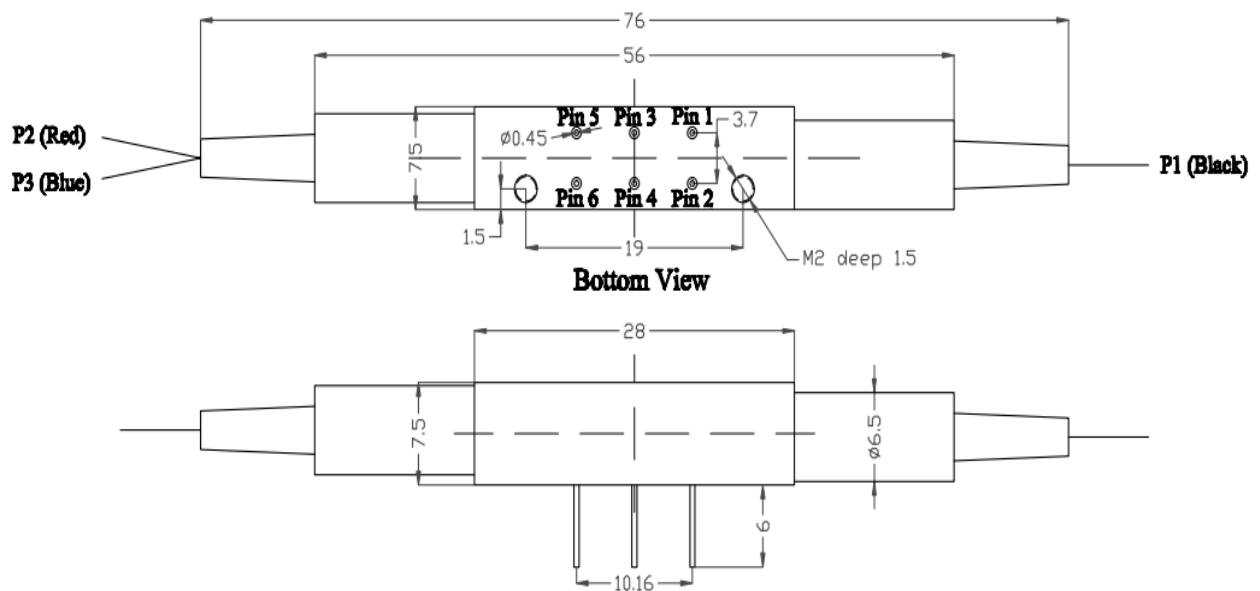
Parameters	Unit	Specifications
Wavelength Range	nm	1500 ~ 1600
Test Wavelength	nm	1550
Insertion Loss ^{1, 2}	dB	I stage≤ 1.0
		II stage≤ 1.3
TDL	dB	≤ 0.30
PDL	dB	≤ 0.30
Return Loss	dB	≥ 50
Crosstalk	dB	I stage≥18
		II stage≥30
Repeatability	dB	≤ ±0.01
Switching Time	ns	≤ 300
Durability	Cycles	≥100 Billions
Switch Type	NA	Non-Latching
Maximum Optical Power	mW	≤ 500
Operating Temperature	℃	-5 ~ +70
Storage Temperature	℃	-40 ~ +85
Dimension	mm	I stage: (L)23.0×(W)7.5×(H)7.5 ±0.2
		II stage: (L)28.0×(W)7.5×(H)7.5 ±0.2
Note: 1 Test at room temperature and SOP. 2 Excluding connectors, 0.2dB for one pair connectors.		

Mechanical Dimensions (Unit:mm)

I stage:



II stage:

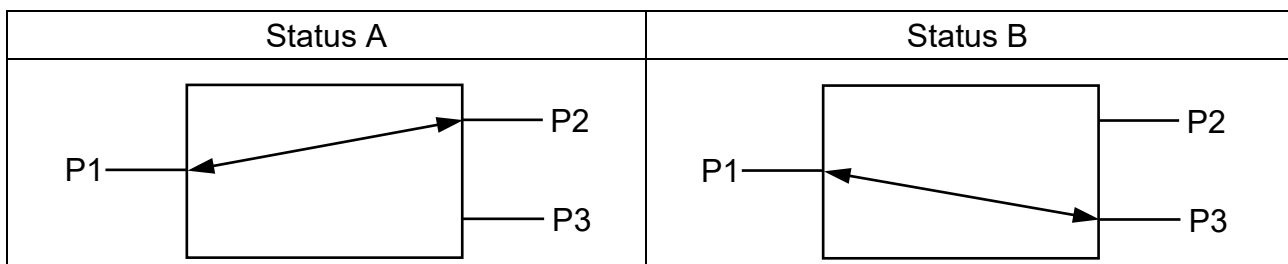


Electrical Drive

Type	Status	Optical Route	Electric Drive					
			Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6
I stage	A	P1 – P2	—	—				
	B	P1 – P3	V	GND				
II stage	A	P1 – P2	—	—	V	GND	V	GND
	B	P1 – P3	V	GND	—	—	—	—

Note: Driving voltage is 85~100V. The performance will be better if you give a base voltage (20~30V) .

Functional Diagram



Ordering Information

YFS-N1x2-□-□-□-□-□-□

—□	—□	—□	—□	—□	—□
Switch Type	Fiber Type	Wavelength	Tube Type	Fiber Length	Connector
I :	SM:	1550:	250:	05:	OO: None
I stage	SM, 9/125	1550nm	250um	0.5m±5cm	FC: FC/PC
II :	X:	X:	900:	10:	FA: FC/APC
II stage	Others	Others	900um	1.0m±5cm	SC: SC/PC
			X:	X:	SA: SC/APC
			Others	Others	LC: LC/PC
					X: Others