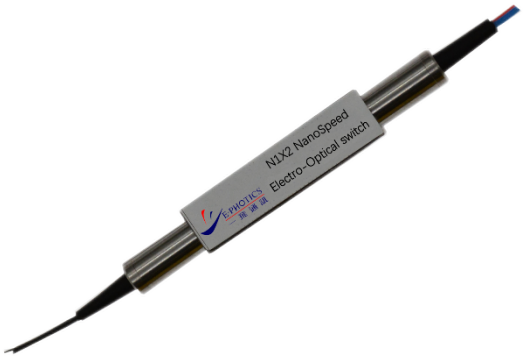
N1x2 NanoSpeed Electro-Optical Switch

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

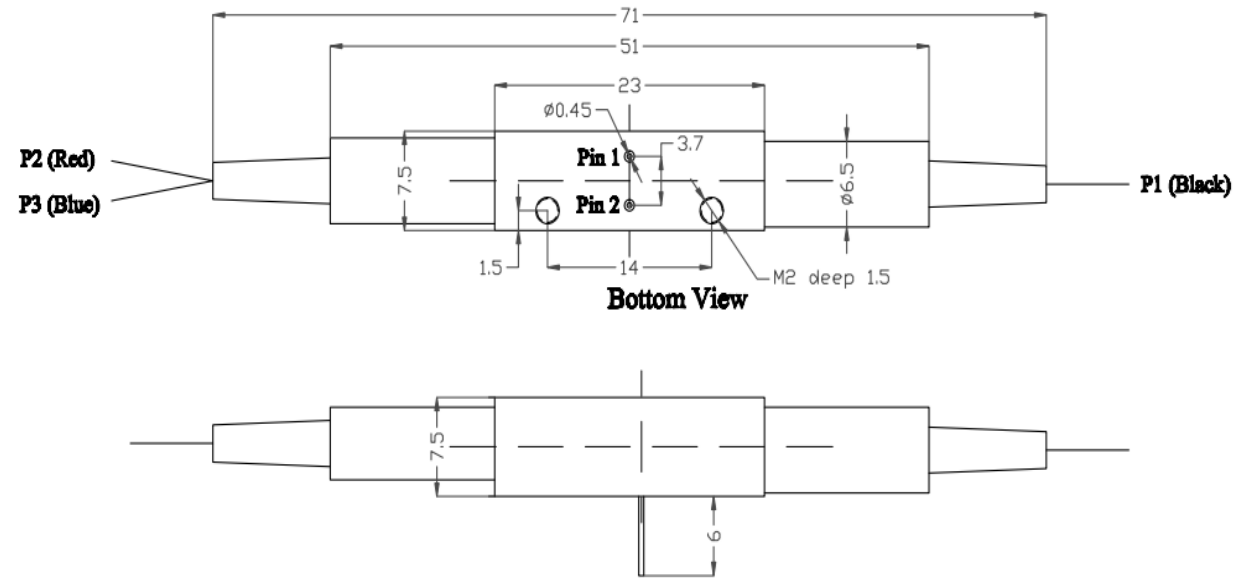
The N1x2 optical switch is connected to the optical path by connecting or blocking the optical signal. The switch has non-mechanical configurations and activated via an electrical control signal. The switch also has build-in circulator and isolator functions. Products are widely used in aerospace and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

Performance Specifications

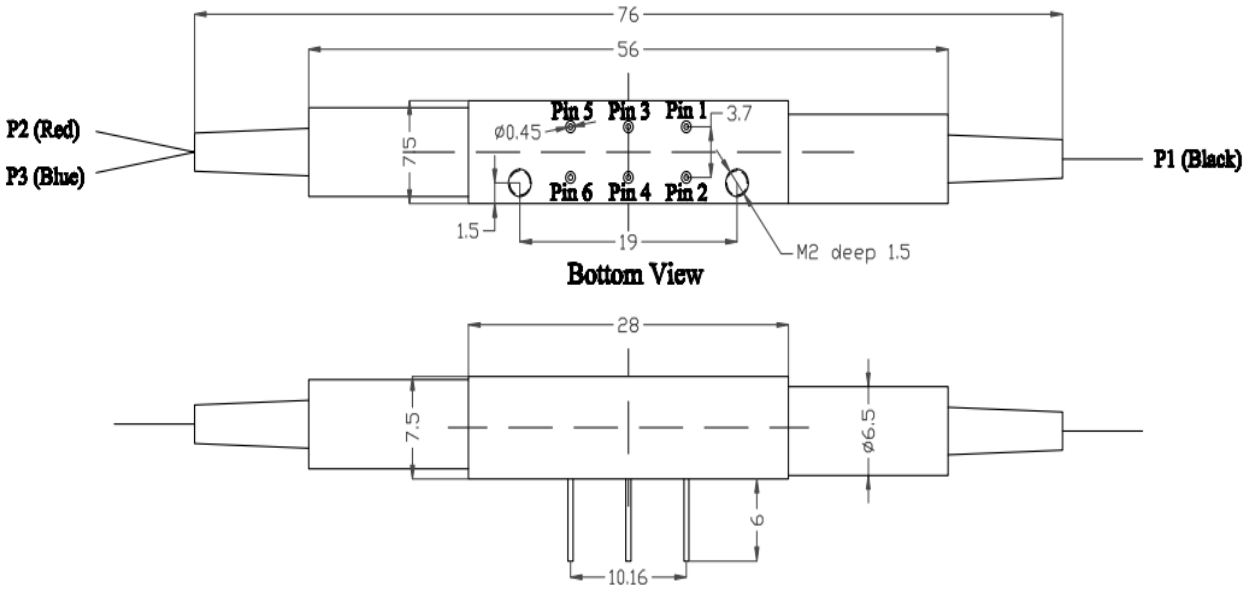
Parameters	Unit	Specifications
Wavelength Range	nm	1500 ~ 1600
Test Wavelength	nm	1550
Insertion Loss [1, 2]	dB	I stage≤ 1.0
		II stage≤ 1.3
TDL	dB	≤ 0.30
PDL	dB	≤ 0.30
Return Loss	dB	≥ 50
Crosstalk	dB	I stage≥18
		II stage≥30
Repeatability	dB	≤ ±0.01
Switching Time	ns	≤ 300
Durability	Cycles	≥100 Billions
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:

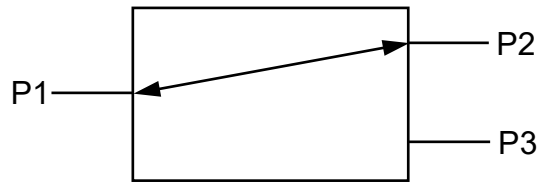
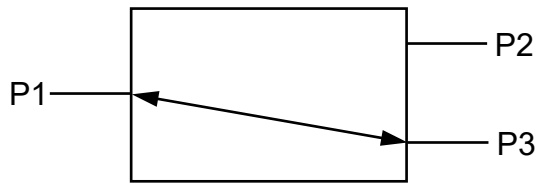


Electrical Drive

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

Status A	Status B
	

Ordering Information

YFS-N1x2-□-□-□-□-□-□

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