Wide Band Nanoshutter™ Optical Switch

Product Description

The Nanoshutter™ optical switch is a low loss, non-blocking, latching component designed for wide-band wavelength switching applications in the 1260 to 1600 nm fiber transmission band. It is ideally suited for applications in fiber optic telecommunications and Hybrid Fiber Coax (HFC) Cable TV systems. It is packaged in a rugged housing with integral electrical pinouts and pigtail fiber leads.

The switching mechanism is activated by applying a latching pulse to either the "Set" or "Reset" lines. Once the switch latches in either the "Set" or "Reset" state, no further power is required to maintain the switch state. In the event of a power failure, the switch remains latched in its current state. The optical switch takes advantage of Nanovation's low cost Nanoblock™ library of optical functions modular approach to the design and manufacturing of optical components for the telecommunications industry.
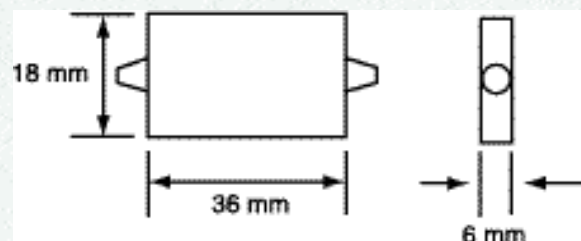
This device is characterized by its low insertion loss, flat wavelength response, high isolation between switched ports, ruggedness and high reliability. It is ideally suited for long haul, metropolitan and local area fiber optic networks including WDM, DWDM, OADM systems and optical component testing. Standard products are intended to include arrays of 1x2, 1x4, 1x8, 2x2 and 4x4 switch configurations with and without 5% monitoring taps. The Nanoblock™ technology employed in the product design is scalable enabling higher levels of system integration.

Customer specific components can be fabricated by combining several optical functions such as splitters, combiners, monitoring taps and switches to form a fully integrated system solution.

For more information about the availability of custom versions of the Nanoshutter™ optical switch direct your inquiries to your local Nanovation sales representative or contact Nanovation directly.

Typical Outline Drawing

PIN	1x2
1	5v
2	GND
3	SET
4	RESET
5	Spare
6	Spare

Product Specifications

Measurement	WX Series	
Port Configuration	1x2	2x2
Bandwidth (nm)	1260-1600	
Insertion Loss (dB)	<1.5	
Optical Input Power (dBm)	20	
Optical Input Return Loss (dB)	>50	
Cross Talk (between "ON" and "OFF" channels) (dB)	>50	
Polarization Dependent Loss (dB)	<0.2	
Switching Speed (mS)	<10	
Switching power (mW)	300	
Operating Temperature (deg C)	0 to +70	
Storage Temperature (deg C)	-20 to +85	
Package Size(mm): x - y - z	36 x 18 x 6	