SN 2:2 Latching Optical Switch, Engineering Prototype



Product Code: SN22+107DUNC

Serial Number: FD241184

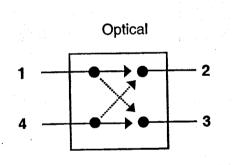
JDS Uniphase Corporation 570 West Hunt Club Road Nepean (Ottawa), Ontario K2G 5W8 Canada

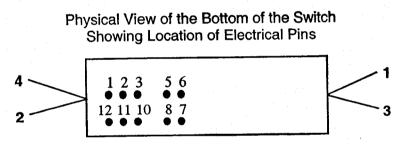
Tel 613 727-1304 Sales 613 727-1303 Fax 613 727-8284 www.jdsunph.com

Operating Instructions:

There are two drive coils inside the switch which are used individually to set the switch in each of the two possible optical states. To change the state of the switch, apply a 5 VDC drive pulse of approximately 20 msec or longer on the electrical drive pins as indicated in the table below. Once the switch has been moved to the new position, it will remain there until a drive pulse appears on the drive coil for the other path. Typical operating current is 40 mA during switching.

There are two sets of single pole double throw contacts which are also operated by the switch. These can be used to sense the position of the switch or to operate other circuits based on the switch path chosen.





Optics Path		El	ectrical Dr	ive	Status Contacts				
	Pin #	1	12	2	11	3 - 5	3-6	10 - 7	10 - 8
1-3, 4-2	Reset	0	0	Gnd	+ 5 VDC	Closed	Open	Open	Closed
1-2, 4-3	Set	Gnd	+ 5 VDC	0	0	Open	Closed	Closed	Open

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Test Results: Insertion Loss @ 5 Vdc

Optical Path	Insertion Loss¹ (dB) @ 1300 nm	Insertion Loss ¹ (dB) @ 1550 nm		
1 – 3	0.34	0.45		
1 – 2	0.47	0.53		
4 – 2	0.29	0.32		
4 – 3	0.40	0.53		

Notes: 1 - Includes the loss of one connector in connectorized versions.

Test Results: Return Loss @ 5 Vdc

Optical Path	Return Loss ² (dB) @1300 nm	Return Loss ² (dB) @1550 nm > 65		
1 – 3	62.3			
1 – 2	63.5	765		
4-2 61.3		765		
4 – 3	>65	765		

Notes: 2 - Excluding connectors

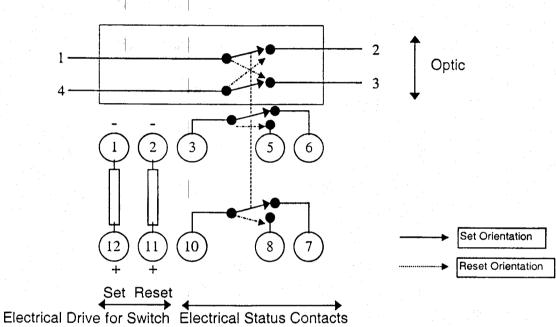
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Optical and Internal Connections



Inspected by: