

1550nm 1x8 SM Mechanical Optical Switch

1550nm 1x8 SM Mechanical Optical Switch is an optoelectronic passive product which can switch or operate the light signal in the optical transmission line or integrated optical path. It's widely used in fiber communication, fiber optic sensor and optical testing systems, high power type is available upon request.

Application:

Fiber Communication
Fiber Optic Sensor
Testing System
Lab & Research

Features:

Low Insertion Loss
High Switching Speed
RoHs Compliant
High Reliability



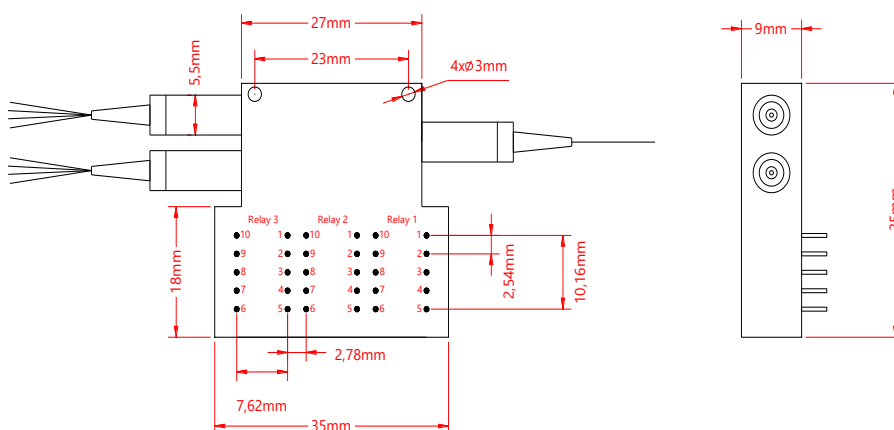
Specification:

Parameter	Symbol	Value	Unit
Center Wavelength	λ	1550	nm
Bandwidth	BW	± 30	nm
Typ. Insertion Loss	IL	0.6	dB
Max. Insertion Loss	IL	0.8	dB
Max. Polarization Dependent Loss	PDL	0.1	dB
Max. Wavelength Dependent Loss	WDL	0.25	dB
Max. Temperature Dependent Loss	TDL	0.25	dB
Min. Return Loss	RL	50	dB
Min. Cross Talk	CT	50	dB
Max. Repeatability		± 0.05	dB
Power Supply		3.0 or 5.0	V
Min. Life Time		10^7	Cycle
Max. Switching Time		8	ms
Max. Optical Power (CW)	P	500	mW
Max. Tensile Load		5	N
Fiber Type		SMF-28e fiber	-
Operating Temperature	T	-5~70	°C
Storage Temperature	T	-40~85	°C
Package Dimension		L35xW35xH9	mm

Notice: Above specifications are tested at center wavelength without connector in room temperature @23°C.

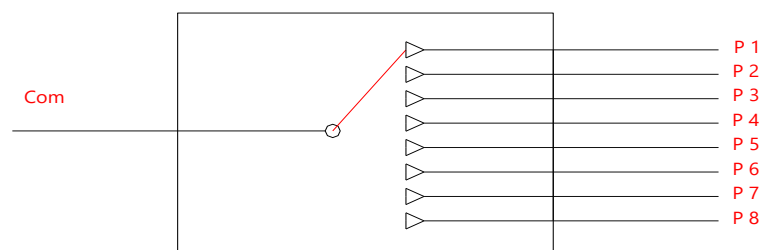
For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.

Drawing:



Pin Information:

Type for 1x8	Optical Path		Electric Drive				Status Sensor			
			Pin 1	Pin 5	Pin 6	Pin 10	Pin 2-3	Pin 3-4	Pin 7-8	Pin 8-9
Latching	Com - P1	Relay 1	-	-	GND	V+	Close	Open	Open	Close
		Relay 2	-	-	GND	V+	Close	Open	Open	Close
		Relay 3	V+	GND	-	-	Open	Close	Close	Open
	Com - P2	Relay 1	-	-	GND	V+	Close	Open	Open	Close
		Relay 2	V+	GND	-	-	Open	Close	Close	Open
		Relay 3	-	-	GND	V+	Close	Open	Open	Close
	Com - P3	Relay 1	-	-	GND	V+	Close	Open	Open	Close
		Relay 2	-	-	GND	V+	Close	Open	Open	Close
		Relay 3	-	-	GND	V+	Close	Open	Open	Close
	Com - P4	Relay 1	-	-	GND	V+	Close	Open	Open	Close
		Relay 2	V+	GND	-	-	Open	Close	Close	Open
		Relay 3	V+	GND	-	-	Open	Close	Close	Open
	Com - P5	Relay 1	V+	GND	-	-	Open	Close	Close	Open
		Relay 2	-	-	GND	V+	Close	Open	Open	Close
		Relay 3	V+	GND	-	-	Open	Close	Close	Open
	Com - P6	Relay 1	V+	GND	-	-	Open	Close	Close	Open
		Relay 2	V+	GND	-	-	Open	Close	Close	Open
		Relay 3	-	-	GND	V+	Close	Open	Open	Close
	Com - P7	Relay 1	V+	GND	-	-	Open	Close	Close	Open
		Relay 2	-	-	GND	V+	Close	Open	Open	Close
		Relay 3	-	-	GND	V+	Close	Open	Open	Close
	Com - P8	Relay 1	V+	GND	-	-	Open	Close	Close	Open
		Relay 2	V+	GND	-	-	Open	Close	Close	Open
		Relay 3	V+	GND	-	-	Open	Close	Close	Open
Non-Latching	Com - P1	Relay 1	-	-	-	-	Close	Open	Open	Open
		Relay 2	-	-	-	-	Close	Open	Open	Open
		Relay 3	V+	-	-	GND	Open	Close	Close	Close
	Com - P2	Relay 1	-	-	-	-	Close	Open	Open	Open
		Relay 2	V+	-	-	GND	Open	Close	Close	Close
		Relay 3	-	-	-	-	Close	Open	Open	Open
	Com - P3	Relay 1	-	-	-	-	Close	Open	Open	Open
		Relay 2	-	-	-	-	Close	Open	Open	Open
		Relay 3	-	-	-	-	Close	Open	Open	Open
	Com - P4	Relay 1	-	-	-	-	Close	Open	Open	Open
		Relay 2	V+	-	-	GND	Open	Close	Close	Close
		Relay 3	V+	-	-	GND	Open	Close	Close	Close
	Com - P5	Relay 1	V+	-	-	GND	Open	Close	Close	Close
		Relay 2	-	-	-	-	Close	Open	Open	Open
		Relay 3	V+	-	-	GND	Open	Close	Close	Close
	Com - P6	Relay 1	V+	-	-	GND	Open	Close	Close	Close
		Relay 2	V+	-	-	GND	Open	Close	Close	Close
		Relay 3	-	-	-	-	Close	Open	Open	Open
	Com - P7	Relay 1	V+	-	-	GND	Open	Close	Close	Close
		Relay 2	-	-	-	-	Close	Open	Open	Open
		Relay 3	-	-	-	-	Close	Open	Open	Open
	Com - P8	Relay 1	V+	-	-	GND	Open	Close	Close	Close
		Relay 2	V+	-	-	GND	Open	Close	Close	Close
		Relay 3	V+	-	-	GND	Open	Close	Close	Close

Optical Path:**Electric:**

Type	Voltage	Current	Resistance
5V Latching	4.5~5.5V	20~24mA	182~220Ω
5V Non-latching	4.5~5.5V	28~34mA	130~159Ω
3V Latching	2.7~3.3V	30~36mA	81~99Ω
3V Non-latching	2.7~3.3V	42~51mA	58~70Ω

Ordering Information (Part Number):

SMSW- WWW - CC - M - D - J - LL - CC						
WWW	CC	M	D	J	LL	CC
Wavelength	Configuration	Mode	Driving Voltage	Fiber Jacket	Fiber Length	Connector
1310 - 1310nm 1550 - 1550nm	13 - 1x3 14 - 1x4	L - Latching N - Non-latching	3 - 3V 5 - 5V	B - 250um Bare Fiber 9 - 900um Loose Tube	05 - 0.5m 10 - 1.0m 15 - 1.5m 20 - 2.0m SS - Specify	NE - None FA - FC/APC FU - FC/UPC SA - SC/APC SU - SU/APC LA - LC/APC LU - LC/UPC SS - Specify