

# 1<sup>ˆ</sup>2 (Type V) Opto-Mechanical Switch

## Features:

- Cost-Effective Solution
- Fast Switching Speed
- Broad Wavelength Range
- Ultra-low Loss
- Latching Configuration
- Hermetic Package
- RoHS Compliant



## Applications:

- Route Fiber Test System
- Sub-system Integration
- Re-configurable OADM
- Test & Measurement Equipment Manufacturing Application

## Specifications<sup>1</sup>:

Parameter	Unit	Grade <sup>2</sup> A <sup>2</sup>	
Central Wavelength (l c)	nm	1310, 1550, 1310&1550	
Bandwidth	nm	100	
Configuration		1 <sup>ˆ</sup> 1, 1 <sup>ˆ</sup> 2	
Insertion Loss <sup>2</sup>	Typ.	0.4	
	Max.	0.6	
Return Loss	Typ.	60	
	Min.	50	
PDL	Typ.	0.03	
	Max.	0.10	
Switching Time	Typ.	5	
	Max.	10	
Cross-Talk	Typ.	70	
	Min.	60	
Switching Speed	Max.	10 Hz	
Switch Voltage	V	4.5~5.5	
Durability	Min.	cycles	10 million
Repeatability <sup>3</sup>	Typ.		+/-0.01
	Max.		+/-0.02
Fiber Type			Corning SMF-28e
Fiber Length	Min.	m	1.0
Power Handling	Max.	mW	500
Operating Temperature		°C	0~70
Storage Temperature		°C	-40~85
Package Dimension	mm		(L)56 (W)14.8 (H)9.8

1. Values referenced without connectors.

2. Insertion Loss at 1310 and 1550nm increases 0.2dB.

3. Repeatability measured at room temperature for 100 cycles.

Package<sup>1</sup>:

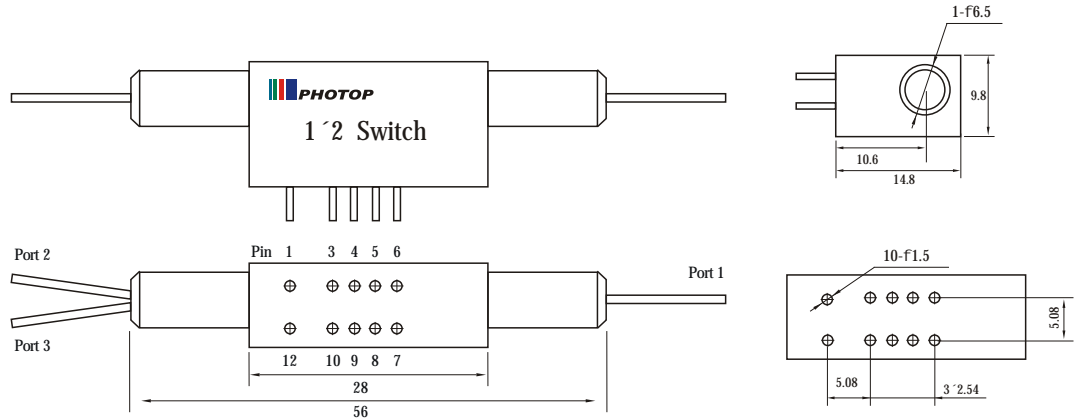
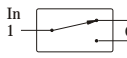
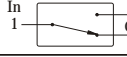


Figure 1. Package Type V

Optical Path	Switch Control				State	Contact Status			
	Pin1	Pin5	Pin6	Pin10		Pin4-3	Pin4-5	Pin9-8	Pin9-10
In1 - Out2	+5V	Gnd	N/A	N/A		Open	Closed	Closed	Open
In1 - Out3	N/A	N/A	Gnd	+5V		Closed	Open	Open	Closed
Switching Current	40mA				Coil Resistance	125ohm			
Latching 4-pin control: pin1, 12, and 6, 7 are used for control. When no power is applied, the switch is latched in place									

Order Information:

KMSW - XXX - X - XXXX - XXXX - XX - XX  
A B C D E F

A Configuration	1'1=1'1 type
	1'2=1'2 type
B Package Type	V=Type V
	S=Custom
C Fiber Type	250S=250mm bare fiber
	900L=900mm loose tube
D Wavelength	1310=1310nm
	1550=1550nm
	1315=1310 & 1550nm
E Control Method	N2=Non-latching 2-Pin Control
	L2=Latching 2-Pin Control
	L4=Latching 4-Pin Control
F Connector	NN=W/O connector
	XY=With connector <sup>1</sup>

1. Please specify the type of connector when ordering.

Mechanical Type	Other	SC	FC	ST	MU	LC
X	0	1	2	3	4	5
Physical Contact Type	Other	PC	UPC	APC		
Y	0	1	2	3		