1x8 Optical Switch

CORNING

Features and Benefits

- Low Insertion Loss
- Monolithic Package
- Cost Effective
- Latching or Non-Latching
- TTL or LVTTL Drive Upon Request
- Customized Driver Circuit Upon Request

Corning's 1x8 Optical Switch is a cost effective component that increases network flexibility. With the optical switching sub-assembly fully integrated with the control circuit, the 1x8 switch provides a digital interface which enables binary switching selection along with fast and repeatable switching performance. The packaging provides high long-term reliability. Corning's 1x8 switch is available in latching and single-side-stable configurations.

Standards

RoHS	Free of hazardous substances according to RoHS2011/65/EU
Design and Test Criteria	Product is qualified to Telcordia GR-1209-CORE and GR-1221-CORE

1x8 Optical Switch

CORNING

1x8 Optical Switch

CORNING

Specifications[1]

Parameters			
	Minimum	Typical	Maximum
Central Wavelength (λc)		1310, 155, and 1310 and 1550 nm	
Bandwidth		100 nm	
Configuration		1x8	
Insertion Loss		1.0 dB	2.0 dB
Return Loss	50 dB	60 dB	
PDL		0.05 dB	0.1 dB
Switching Time		5 ms	10 ms
Cross-Talk	60 dB	70 dB	
Switching Speed			10 Hz
Switch Voltage[2]		4.5-5.5 V	
Durability	10 mil. Cycle		
Repeatabiity[3]		±0.01 dB	±0.02 dB
Power Handling			300 mW
Operating Temperature		0°C to +70°C	
Storage Temperature		-40°C to +85°C	

Notes:

[1] Specifications do not include connecor loss
[2] Lower switch voltage available upon request
[3] Repeatability measured at room temperature for 100 cycles

Shipping Package		
Packaging Dimensions	Fiber Type	Pigtail Length
86 mm (L) x 80 mm (W) x 15.7 mm (H)	Corning® MF-28e®	1 m (Standard)

Electrical Pin

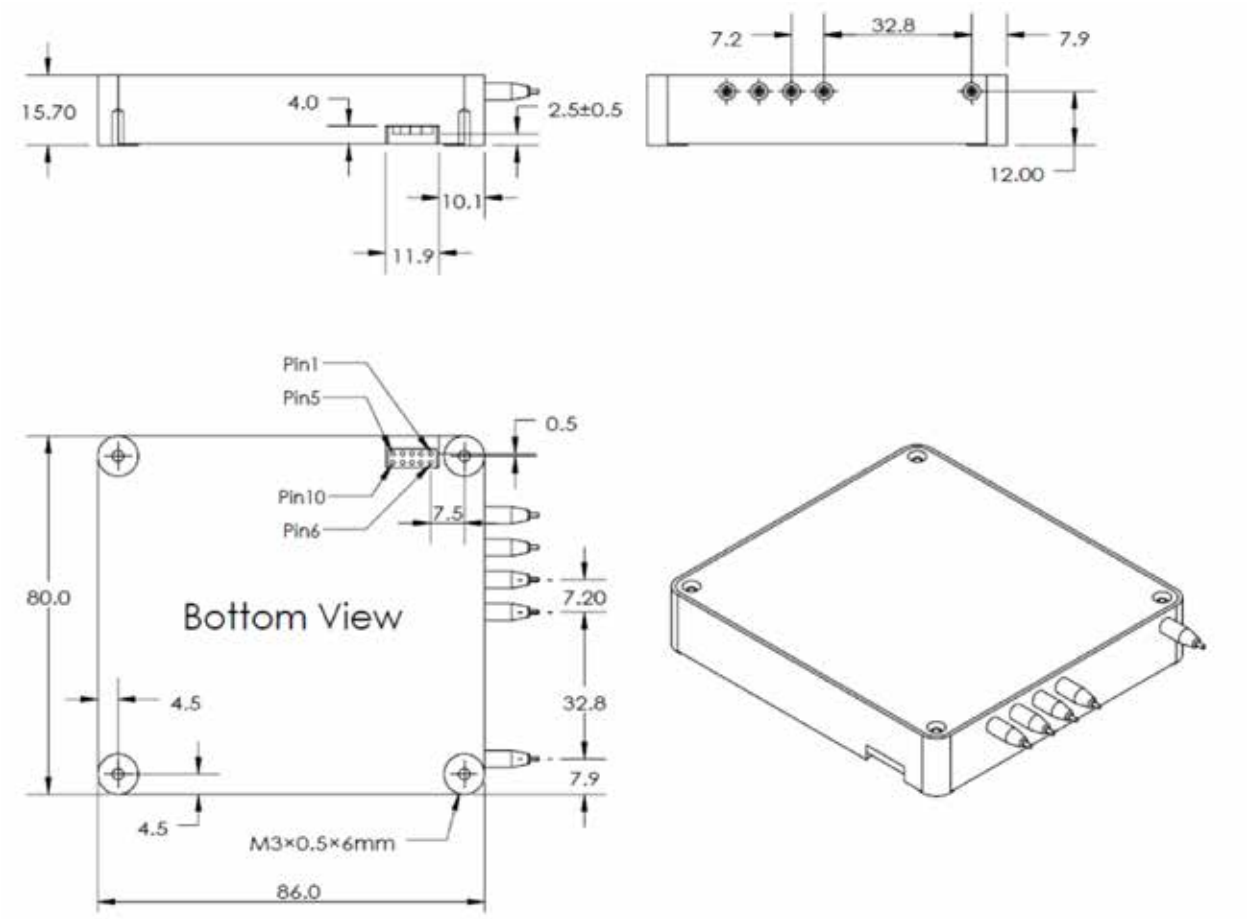
Pin Number	Signal Name	Signal Type	Description
1	AVCC	Power	+5.0-VDC analog power supply
2	AGND	Power	Analog ground
3	D0	Input	Port selection bit 0 (LSB)
4	D1	Input	Port Selection bit 1
5	D2	Input	Port selection bit 2 (MSB)
6	STROBE	Input	Falling-edge -trigger strobe signal
7	READY	Output	Ready status bit (high=not ready, low=ready)
8	ERROR	Output	Error status bit (high=no error, low=error) Min 5 mA
9	DGND	Power	Digital ground
10	DVCC	Power	+3.3-VDC digital power supply

Switching Logic – Port Selection Control Logic

D2	D1	D0	Active Port
0	0	0	1
0	0	1	2
0	1	0	3
0	1	1	4
1	0	0	5
1	0	1	6
1	1	0	7
1	1	1	8

Command	Minimum (V)	Maximum (V)
High Level Input Voltage	2.0	-
Low Level Input Voltage	0.0	0.8
High Level Output Voltage	2.4	-
Low Level Output Voltage	0.0	0.4

Packaging Layout: 1x8 Optial Switch



1x8 Optical Switch

CORNING

Ordering Information

1x8 Optical Switch

S W 1 - 4 [1] [2] [2] - [3] [4] [5] 0 [6]

1 Select Mode
1: Single-mode
2: Multimode 62.5/125 µm
3: Multimode 50/125 µm

2 Select Wavelenth
31: 1310 nm
35: 1310 and 1550 nm
55: 1550 nm
85: 850 nm

3 Select Buffer
1: 250 µm Bare Fiber
2: 900 µm Loose Tube
3: Others

4 Select Connector*
A: None
K: LC/APC
L : LC/PC
P: FC/PC
Q: FC/APC
S: SC/PC
T: SC/APC
U: MU/PC
Z: Others

5 Select Type
1: Latching
2: Non-Latching

6 Select Customization
Running number used for special types or custom made

Note:
** Specifications do not include connector loss*

These part numbers are specific to Corning Optical Communications OEM Solutions Business Unit. Please contact OEM sales at +1-408-736-6900 or oemsales@corning.com and visit www.corning.com/opcomm/oem for sales support.

RoHS COMPLIANT

Corning Optical Communications LLC • PO Box 489 • Hickory, NC 28603-0489 USA
800-743-2675 • FAX: 828-325-5060 • International: +1-408-736-6900 • www.corning.com/opcomm/oem • Email: oemsales@corning.com

CORNING