1x8 MEMS SM Fiberoptic Switch



ACP 1xN MEMS optical switch is based on low-loss MEMS chips with tilting mirrors technology. The MEMs switch is extremely stable and reliable, covered wide wavelength range from 1260nm to 1670nm. The intelligent management of the control system realizes the optical switching from COM port to any channel.

PERFORMANCE SPECIFICATIONS

Parameter	Specifications		
Operating Windows	Single	Dual	Full Band
Operating Wavelength	1310 or 1550 C 40nm	1310 /1550 ± 40nm	1260 ~ 1650nm
Insertion Loss (Typical)	≤ 0.6dB	≤ 0.8dB	≤ 1.4dB
Insertion Loss (Max.)	≤ 0.8dB	≤ 1.0dB	≤ 1.6dB
Wavelength Dependent Loss (WDL) at CWL ± 20nm	≤ 0.30dB		
Polarization Dependent Loss (PDL)	≤ 0.15dB		
Channel Crosstalk	≥ 45dB		
Return Loss	≥ 50dB		
Repeatability	± 0.05dB		
Switching Speed (Max.)	≤ 20ms		
Durability (Cycles)	≥ 10^9		
Optical Power	≤ 500mW		
Power Supply	4.75 ~ 12.5V		
Control Interface	TTL or I^2C		
Operating Temperature	-10 to +70°C		
Storage Temperature	- 40 to +85°C		
Package Dimensions (LxWxH)	A=34x16x9.2		

All values referenced are without connector.

FEATURES

Small Package

High Stability, High Reliability

Non-Latching

APPLICATION

DWDM Networks

Channel Monitor

R&D in Laboratory

email: sales@acphotonics.com tel: 408.986.9838 www.acphotonics.com

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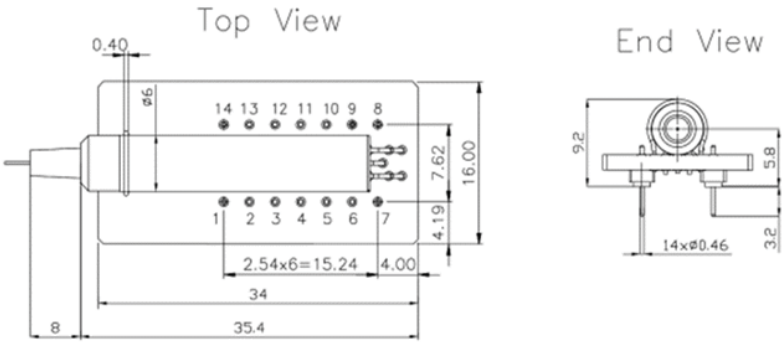
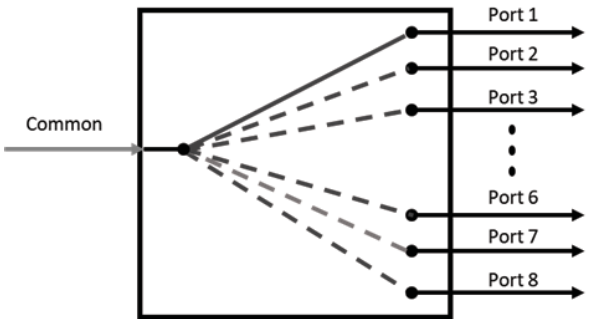
MECHANICAL DIMENSIONS

A Package



PORT CONFIGURATIONS



PIN CONFIGURATIONS

TTL/UART

Pin	Signal Name	Description	I/O	Specification
1	NC	Not Connect		
2	VCC	DC Power Supply	Power	4.75~12.5
3	STORBE	Strobe signal, Falling edge of the effective	IN	TTL/LVTTL
4	GND	Ground	Power	
5	D0	Data 0 Input	IN	TTL/LVTTL
6	D1	Data 2 Input	IN	TTL/LVTTL
7	D2	Data 2 Input	IN	TTL/LVTTL
8	NC	Not Connect		
9	TXD	UART Serial Data Output	OUT	TTL/LVTTL
10	RXD	UART Serial Data Input	IN	TTL/LVTTL
11	GND	Ground	Power	
12	NC	Not Connect		
13	D3	Data 3 Input	IN	TTL/LVTTL
14	/RESET	Active-Low Reset	IN	TTL/LVTTL

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PIN CONFIGURATIONS

I2C/UART

Pin	Signal Name	Description	I/O	Specification
1	NC	Not Connect		
2	VCC	DC Power Supply	Power	4.75~12.5
3	NC	Not Connect		
4	GND	Ground	Power	
5	A0	I2C Address A0	IN	TTL/LVTTL
6	SDA	12C Data	IN	TTL/LVTTL
7	SCL	I2C Clock	IN	TTL/LVTTL
8	NC	Not Connect		
9	TXD	UART Serial Data Output	OUT	TTL/LVTTL
10	RXD	UART Serial Data Input	IN	TTL/LVTTL
11	GND	Ground	Power	
12	NC	Not Connect		
13	A1	I2C Address A1	IN	TTL/LVTTL
14	/RESET	Active-Low Reset	IN	TTL/LVTTL

ORDERING INFORMATION

MEMS

Option	Operating Wavelength	Port	Package	Fiber Type*	Pigtail Style	Fiber Length**	In Connector	Out Connector
N=Non-Latching	31=1310nm 55=1550 nm 3155=1310/1550nm 2665=1260~1650nm	108=1x8	A=A Package	2=SMF-28 Ultra (G.657.A1) 3=ClearCurve ZBL(G.657.B3)	1=Bare fiber	05=0.5m 10=1.0m · · · 20=2.0m	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 6=LC/UPC 7=LC/APC	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 6=LC/UPC 7=LC/APC

*1=SMF-28(G.652) is available upon request.

** Other length is available upon request.

RELATED PRODUCTS

MEMS SM Fiber Optic Switch with Control Board