

CrystaLatch™ 2x2 Solid-State Fiberoptic Switch

Product Description

The CL Series 2x2 solid-state fiber optic switch connects optical channels by redirecting an incoming optical signal into a selected output optical fiber. This is achieved using a patent pending non-mechanical configurations and activated via an electrical control signal. Latching operation preserves the selected optical path after the drive signal has been removed. The solid-state all-crystal design eliminates the need for mechanical movement and organic materials. The CL fiberoptic switch is designed to meet the most demanding switching requirement of ultra-high reliability, fast response time, and continuous switching operation.

Performance Specifications

CL Series 2x2 Switch	Min	Typical	Max	Unit
Operation Wavelength ¹	C-Band	1520~1570		nm
	1310	1295~1325		nm
Insertion Loss ²		0.8	1.2	dB
Cross Talk(Single Stage) ³	20	25		dB
Polarization Dependent Loss		0.1	0.2	dB
Return Loss	50	55		dB
Polarization Mode Dispersion		0.1	0.2	ps
Switch Speed (rise, fall)	20	50	200	μs
Repetition Rate ⁴		5K		Hz
Drive Current (2.5 V)	120	145	170	mA
Operating Temperature	-5		70	°C
Optical Power Handling		300	500	mW
Storage Temperature	-40		85	°C
Fiber Type	Corning SMF-28			
Package Dimension	mm			

1. Agiltron can achieve same SPEC at L band.
2. Measured without connectors.
3. Agiltron is able to take a special order with 40 dB Cross Talk.
4. If the switch work at >1 KHZ, pulse duration should be 0.1 ms.

Features

- Solid-State high speed
- Ultra-high reliability
- Fail-safe latching
- Low insertion loss
- Direct low voltage drive
- Compact
- Low cost

Applications

- Optical channel blocking
- Configurable Add/Drop
- System monitoring
- Instrumentation

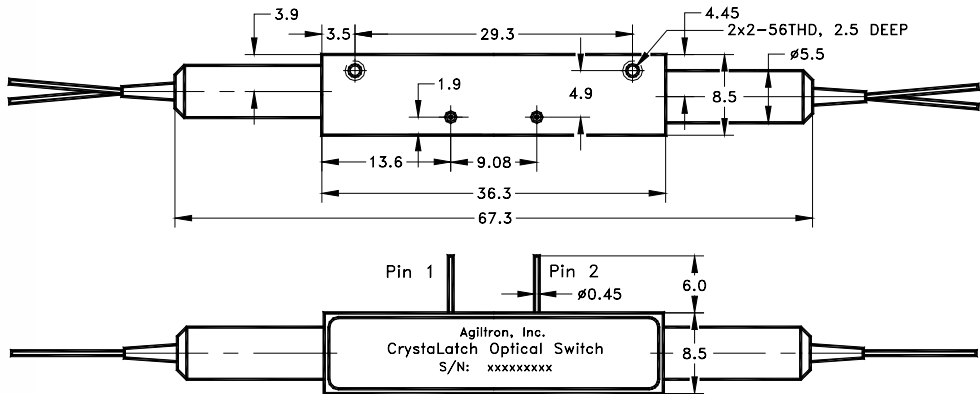
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Electrical Driving Requirements

Parameter	Minimum	Typical	Maximum	Unit
Switch Voltage	2.4	2.5	2.6	V
Switch Current	120	145	170	mA
Pulse Duration	0.1	1.0	100	ms

Evaluation kit with TTL and RS232 interface and Windows™ GUI also available

Mechanical Dimensions (mm)



Ordering Information

CLSW-	Type	Wavelength	Switch	Package	Fiber Type	Fiber Length	Connector	
<input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	2x2=22	1310=3 1550=5 Special=0	Single stage=1 Special=0	Standard=1 Special = 0	SMF-28 =1 Special=0	Bare fiber=1 900um loose tube=3 Special = 0	0.25m=1 0.5m=2 1.0=3 Special=0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0