

CrystaLatch™ True Bi-Directional 1x1, 1x2 Solid-State Fiberoptic Switch

Product Description

The CL Series true bi-directional 1x1 and 1x2 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 1x1, 1x2 Switch		Min	Typical	Max	Unit
Operation Wavelength *		1520	1550	1580	nm
		1295	1310	1325	nm
Insertion Loss	Single Stage		0.8	1.0	dB
	Dual Stage		0.8	1.1	
Cross Talk	Single stage	18	25	30	dB
	Dual Stage	35	50	55	
Switch Time (Rise, Fall)		20	50	200	μs
Repetition Rate			5K		Hz
Polarization Dependent Loss			0.1	0.2	dB
Polarization Mode Dispersion			0.1	0.2	ps
Return Loss		32	50		dB
Operating Temperature		-5**		70	°C
Optical Power Handling			300	500	mW
Storage Temperature		-40		85	°C
Fiber Type		Corning SMF-28			
Package Dimension		58.2L x 8.4W x 8.4H			mm

* Agiltron can achieve same SPEC at L band.

** -40°C version is also available.

15 Cabot Road, Woburn, MA 01801 Tel: (781) 9351200 Fax: (781) 935-2040

www.agiltron.com

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

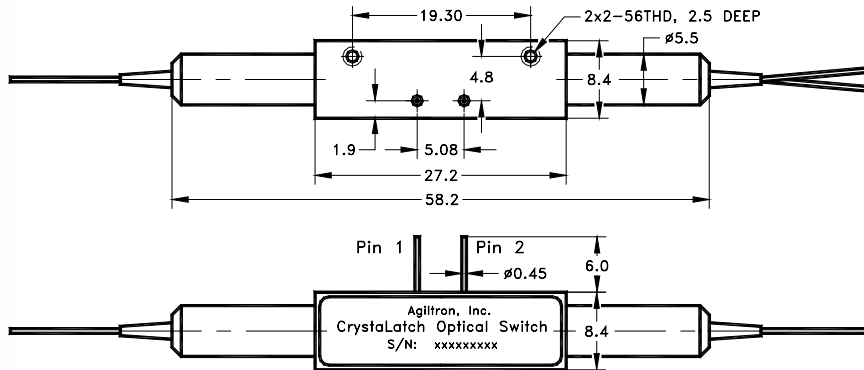
CrystaLatch™ True Bi-Directional 1x1, 1x2 Solid-State Fiberoptic Switch

Electrical Driving Requirements

Parameter		Typical	Minimum	Maximum	Unit
Switch Voltage	Single Stage	2.5	2.4	2.6	V
	Dual Stage	5	4.8	5.2	
Switch Current		147	122	167	mA
Pulse Duration		180	200	220	μs

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

Mechanical Dimensions (mm)



Ordering Information

CLBD -	Type	Wavelength	Configuration	Package Type	Fiber Type	Fiber Length	Connector Type
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1x1=1B 1x2=2B	1550 = 5 Special = 0	Single Stage = 1 Dual Stage = 2	Special=0	SMF-28 250um=1 SMF-28 900um Loose Tube=2 Special=0	0.25m=1 0.5m =2 1.0 m=3 Special=0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0