

CrystaLatch™ 1x2 Solid-State Multicasting Fiberoptic Switch

Product Description

The CL Series 1x2 solid-state Multicasting Fiber Optic Switch connects optical channels by redirecting an incoming optical signal into a selected output optical fiber or splitting the light into two outputs with equal intensity and little loss. This is achieved using a patent pending non-mechanical configuration and activated via a low voltage electrical control signal. Latching operation preserves the selected optical path after the drive signal has been removed. The all-solid-state crystal design eliminates the need for mechanical movement and organic materials. The CL fiber optic switch is designed to meet the most demanding switching requirement of ultra-high reliability, fast response time, and continuous switching operation.

Features

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

Performance Specifications

CL Series 1x2 Switch	Min	Typical	Max	Unit
Operation Wavelength ¹	1520	1550	1580	nm
	1310	1295-1325		nm
Insertion Loss ²	0.4	0.7	1.0	dB
Cross Talk	20	28	38	dB
Splitting power difference	0	0.15	0.5	dB
Switch Speed	20	50	200	μs
Repetition Rate		5K		Hz
Polarization Dependent Loss		0.05	0.20	dB
Polarization Mode Dispersion		0.1	0.2	ps
Return Loss ²	50	55	60	dB
Drive Current (2.5V)	± 120	± 140	± 250	mA
Operating Temperature	-5 ³		70	°C
Optical Power Handling		300	500	mW
Storage Temperature	-40		85	°C
Fiber Type	Corning SMF-28			
Package Dimension	(L)74.6x(W)8.4x(H)8.6			mm

1. Agiltron can achieve same SPEC at L band
2. Exclude connectors
3. -40°C version is also available

Applications

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

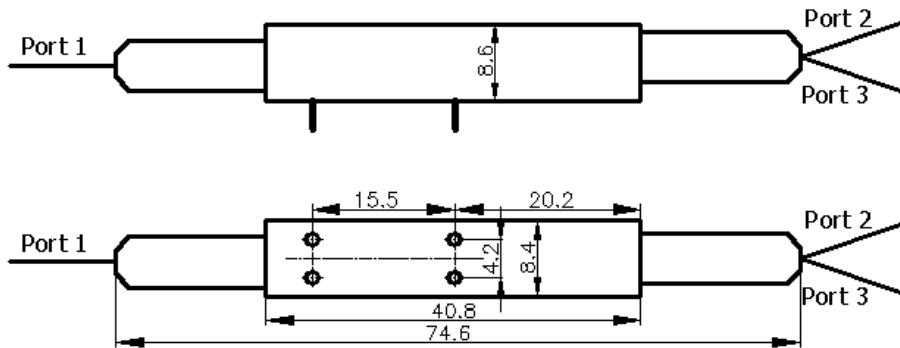
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Electrical Driving Requirements

Parameter	Typical	Minimum	Maximum	Unit
Switch Voltage	2.5	2.2	2.8	V
Switch Current	140	120	200	mA
Pulse Duration	1	0.1	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	
3 2		1310=3 1550=5 Special=0	1	1	SMF-28 =1 Special=0	Bare fiber=1 900µm 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