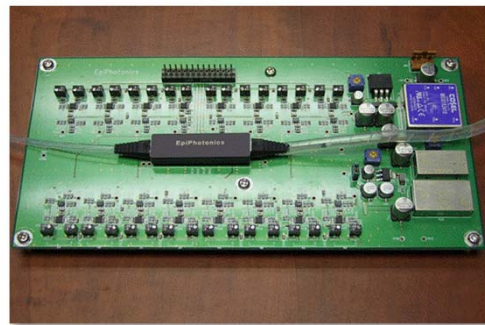
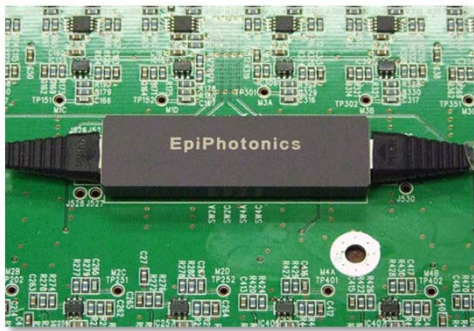


## Nano-Second Speed 1x2 Optical Switch : EPS-0102

### Product Description

The PLZT optical switch module and PLZT optical switch subsystem are powerful tool to switch optical signal at nano-second speed. The PLZT optical switch subsystems are equipped with PLZT switches and high-speed drivers in 19 inch cases.



### Features

Thanks to its efficient electro-optic properties and high refractive index. EpiPhotonics' unique PLZT waveguide technology enables a new generation of efficient optical switch subsystems with potent advantages. In addition, the PLZT products are very reliable and environmentally stable. The crystal structure of our PLZT materials and the fact that our optical switches have absolutely no moving parts guarantee high reliability and stability.

High-speed switching	Nano-second by low-voltage driving
Low-power consumption	Minimal-power by low-voltage driving
Low polarization dependence	Polarization insensitivity by material nature
Low insertion loss	Reduced by buried waveguide structure
Excellent stability	Stability by inorganic crystalline nature
Compact size	Miniaturized by efficient material properties

### Applications

The PLZT high-speed and low-power consumption products provide the key differentiators for many optical switching applications such as;

- Optical packet switching (OPS)
- Optical burst switching (OBS)
- On-demand ROADM
- On-demand crossconnects
- Switched optical access networks
- Optical interconnections (data center networks, server backplanes)
- High-speed protections

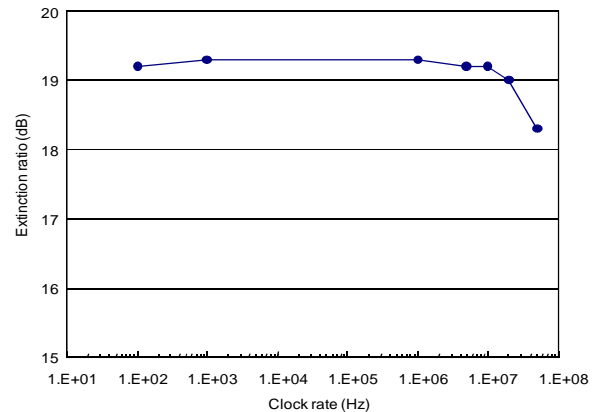
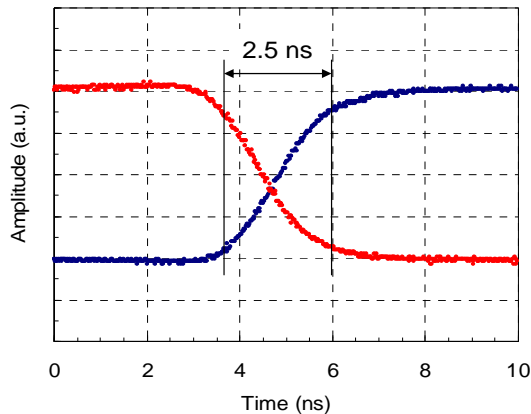
Parameters	Specifications (preliminary)
Scale	1x2 (array option available)
Operating wavelength	1550 nm (C-band)
Rise and fall time	< 10 ns
Repetition rate	DC to > 10 MHz
Insertion loss	5.0 dB typ (Premium: < 4.0 dB)
Crosstalk	30 dB typ
Return loss	20 dB typ (premium: 30 dB typ)
PDL	1.0 dB typ (premium: < 0.5 dB)
Operating input power	> 500 mW
Switching voltage (switch)	10V typ
Power supply voltage (switch driver board*)	24/48 VDC (Rack mount type: 110/220 VAC)
Power consumption (switch)	2 mW at 1 MHz, 20 mW at 10 MHz
Power consumption (switch driver board*)	2.1 W at 1 MHz, 2.5 W at 10 MHz
Switch driver board* control interface	3.3V TTL Parallel (RS-232 option available)

\* Optional

Dimensions	Specifications (preliminary)
Switch module	43 x 13 x 6 mm <sup>3</sup> (W x D x H)*
Switch driver board*	200 x 105 x 14 mm <sup>3</sup> (W x D x H)*
Rack mount*	1U-19" rack

\* Optional

## Typical Switching Speed and Repetition Data



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