Photonic Network Innovation

Since 1980 the research and development of PLC (planar lightwave circuit) devices using silica glass waveguides has been conducted.

As a result of the continuing development of this technology we have realized the mass production of PLC devices for optical communications

and optical signal processing with high performance and high reliability.

We will continue to support photonic network innovations by developing new PLC devices.

1xN Optical Switch

Our optical switches are very stable and reliable since they have no moving parts. They consist of planar lightwave circuit Mach-Zehnder interferometers with thermo-optic phase shifters. They can be used for OADM and OXC.

• 2-Arrayed Type Available

NEL

- High Extinction Ratio
- Milliseconds Response
- No Moving Parts



2-Arrayed 1x8 Optical Switch

Line up

- Single 1 x 8 Optical Switch
- 2-Arrayed 1 x 8 Optical Switch
- 2-Arrayed 1 x 16 Optical Switch

Logical Structure



NEL

Specifications

	1x8 Optical Switch		1x16 Optical Switch
Array Numbers	1	2	2
Operating wavelength	1550 nm Region		
Insertion Loss	≦ 3 dB		≦ 4 dB
Loss Uniformity	≤ 1.5 dB		
Extinction Ratio	≥ 40 dB		
PDL	≤ 0.5 dB		
Return Loss	≥ 40 dB		
Switching Speed	≤ 3 ms		
Power Consumption	≦ 1.8W	≦ 3.6W	≦ 2.7W
Environmental Temperature	0 to 65 °C		
Switching Control	Direct Drive		
Recommended Cooling Condition	Forced air cooling required (> 1.5m/sec recommended)		
Dimension (W x D x H)*	$130 \times 22 \times 13 \text{ mm}^3$	$142 \times 33.3 \times 13 \text{ mm}^3$	$122 \times 53 \times 13 \text{ mm}^3$

*excluding PCB fixing parts and fibers

Optical Characteristics



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