

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.

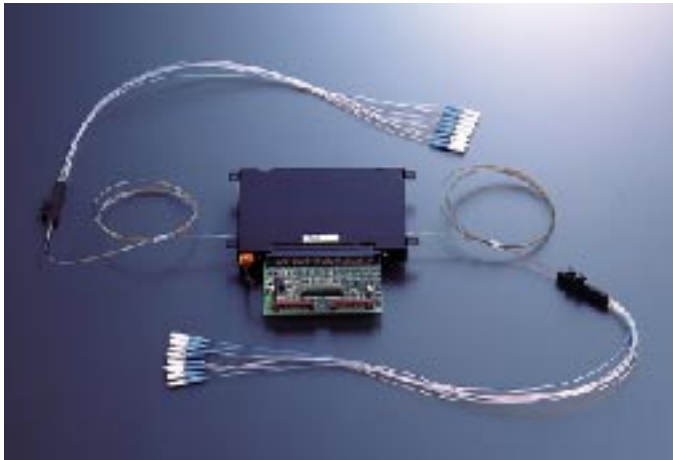
We will continue to support photonic network innovations by developing new PLC devices.

Thermo-Optic Switch

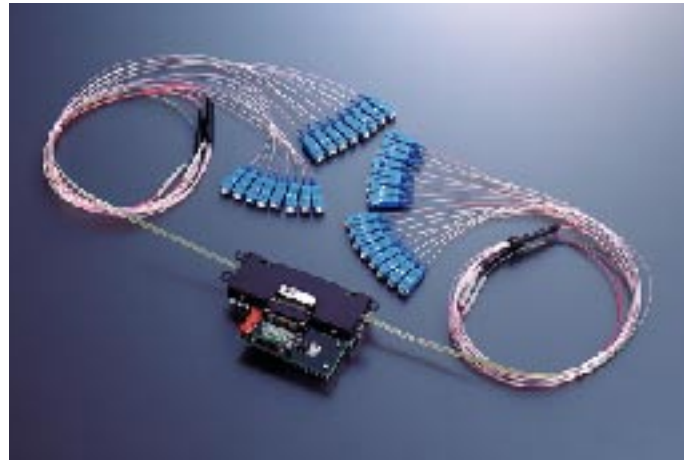
Our optical switches are very stable and reliable since they have no moving parts.

They consist of planar lightwave circuit Mach-Zehnder interferometers with thermo-optic phase shifters.

They can be used for OADM and OXC.



8x8 Non-blocking Optical Matrix Switch



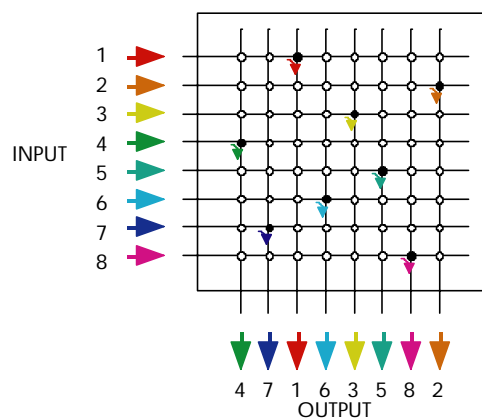
8-Arrayed 2x2 Optical Switch

Line up

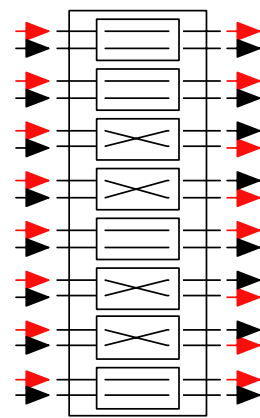
8x8 Non-blocking Optical Matrix Switch

8-Arrayed 2x2 Optical Switch

Logical Structure



8x8 Non-blocking Optical Matrix Switch



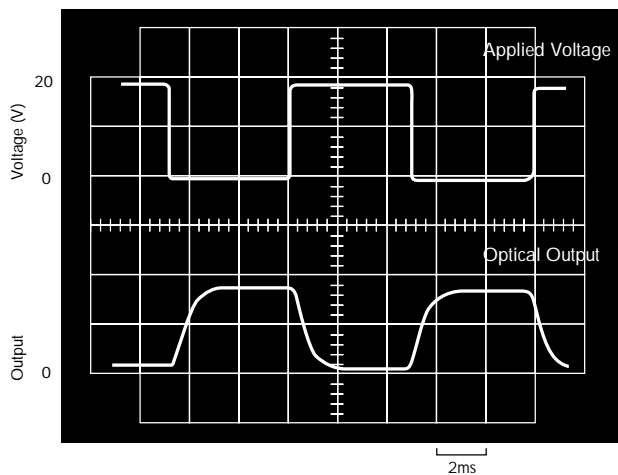
8-Arrayed 2x2 Optical Switch

Specifications

	8x8 Non-blocking Optical Matrix Switch	8-Arrayed 2x2 Optical Switch
Input/Output Port	8x8 (non-blocking)	8-Arrayed 2x2 (Input:16, Output 16)
Operating Wavelength	1550nm	1550nm
Insertion Loss	< 8dB	< 3dB
Loss Uniformity	< 2dB	-
Extinction Ratio	> 40dB	> 35dB
PDL	< 0.5dB	< 0.5dB
Return Loss	> 40dB	> 40dB
Switching Speed	< 3ms	< 3ms
Power Consumption	<8W (PLC Module) , 2.8W (drive circuit)	<14.4W (PLC Module) , 6W (drive circuit)
Operating Ambient Temperature	0 to 65°C	0 to 65°C
Switching Control	TTL Drive (+ 5V)	TTL Drive (+ 5V)
Power Supply	+24V±5% / 0.45A (max)	+24V±5% / 0.85A (max)
Cooling	Forced Air cooling required (>1.5m/sec. Recommended)	
Dimensions (WxDxH) *	145 x 156 x 23 mm ³	110 x 80 x 20 mm ³

* excluding PCB fixing parts and fibers

Switching Response



Model Numbers

8x8 Non-blocking Optical Matrix Switch

TPMS08DM

Connector S:SC, F:FC, M:MU, L:LC, E:E2000

Fiber S:SMF, D:DSF, P:PMF

8-Arrayed 2x2 Optical Switch

T2M08MDM

Connector S:SC, F:FC, M:MU, L:LC, E:E2000

Fiber S:SMF, D:DSF, P:PMF

All information and specifications are subject to change without notice.