## 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.

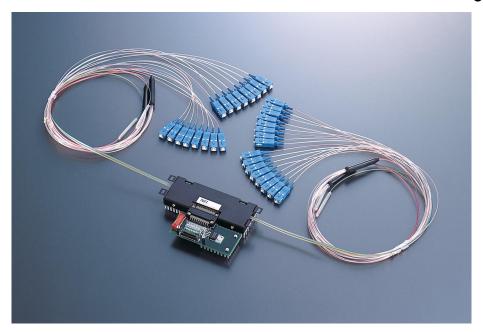
# 8-Arrayed 2x2 Optical Switch

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

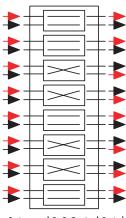
They consist of planar lightwave circuit Mach-Zehnder interferometers with thermo-optic phase shifters.

They can be used for OADM and OXC.

- Compact Size
- Multi-channel Integration
- Milliseconds Response
- No Moving Parts



**Logical Structure** 



8-Arrayed 2x2 Optical Switch

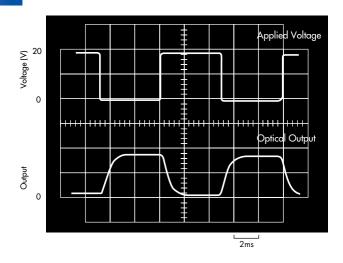


### **Specifications**

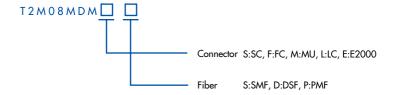
	8-Arrayed 2x2 Optical Switch
Operating wavelength	1550 nm Region
Insertion Loss	≤ 3 dB
Extinction Ratio	≥ 35 dB
PDL	≤ 0.5 dB
Return Loss	≥ 40 dB
Switching Speed	≤ 3 ms
Power Consumption	≤ 14.4W (PLC Module), 6W (drive circuit)
Environmental Temperature	0 to 65 °C
Switching Control	TTL Drive (+5V)
Supply Voltage/Current	24V±5%, 0.85A(Max)
Recommended Cooling Condition	Forced air cooling required (> 1.5m/sec recommended)
Dimension (W x D x H)*	$110 \times 80 \times 20 \text{ mm}^3$

<sup>\*</sup>excluding PCB fixing parts and fibers

#### **Switching Response**



### **Model Numbers**



All information and specifications are subject to change without notice.





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