

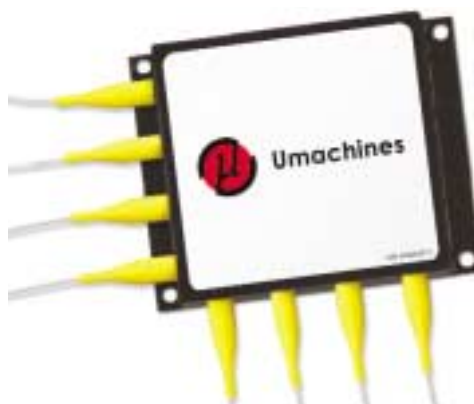
4 X 4 FIBER OPTIC SWITCH

Umachines has leveraged its expertise in Microelectromechanical Systems (MEMS) to develop 4 x 4 MEMS switches featuring low insertion loss, low power consumption and high reliability.

PRODUCT DESCRIPTION

This small switch provides channel selection between four input fibers and four output fibers for a number of network functions. The switch is designed to operate across a wide range of temperature and humidity conditions and over the full wavelength range of 1280 nm to 1610 nm independent of signal transmission data rates or protocol.

Mechanically, the MEMS element is designed to avoid both stiction and frictional wear and to withstand the shocks and vibrations associated with both transportation and system operation. The result is a highly reliable device which provides accurate switching over a long lifetime with low power consumption.



FEATURES

- Highly reliable: switch life is greater than 100 million cycles
- Low loss
- Low power consumption
- Small form factor
- Stiction free

APPLICATIONS

- Reconfigurable Optical Add/Drop Multiplexing (ROADM)
- Monitoring
- Provisioning

PRELIMINARY SPECIFICATIONS

Insertion Loss	<2dB (1.5dB typ.)
Return Loss	>55dB
Crosstalk	<-55dB
Polarization Dependent Loss	<0.1dB
Switching Time	<10ms
Shock Resistance	To 500 G
Power Consumption	100mW
Lifetime	>100M cycles
Operating Temperature	-10 to 65 °C
Storage Temperature	-40 to 85 °C

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