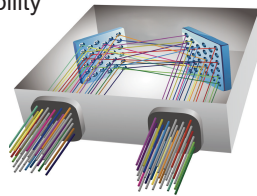




- Proven MEMS technology
- Lifetime > 10^9 switch cycles
- No dithering or active alignment artifacts
- Switches and holds dark fiber connections
- Low insertion loss with excellent stability
- Compact and lightweight
- Asymmetric MxN available



- Headquartered in California since 1986
- US based in-house MEMS fab
- Over 3 million MEMS mirrors produced since 1999
- Manufactures TAA compliant products

MX1 - T - 62 - - T - - N -

| | |
|--|---------------------|
| Grade | |
| T | Standard |
| Switch Configuration | |
| 16x16 | 16x16 |
| MxN | M≤16, N≤16 |
| Fiber Type | |
| 62 | 62.5 μm |
| *Other fiber options available upon request | |
| Test Wavelength | |
| 850 | 850 nm |
| O | 1310 nm |
| C | 1550 nm |
| 850/O | 850/1310 nm |
| O/C | 1310/1550 nm |
| *Other wavelength options are available upon request | |
| Fiber Jacket | |
| T | 900 μm Tight Buffer |
| *Other fiber options available upon request | |
| Connector Type | |
| N | None |
| FC | FC/UPC |
| FC/APC | FC/APC |
| LC | LC/UPC |
| LC/APC | LC/APC |
| SC | SC/UPC |
| SC/APC | SC/APC |
| *Other connector types available upon request | |
| Connector Key Orientation | |
| N | None |
| Pigtail Length | |
| 1 | 1 Meter |
| X | Specify X Meters |
| *Tolerance is +/- 0.05 m | |

MEMS 16X16 OPTICAL MATRIX SWITCH MODULE

MX1 Model, Multimode Fiber, Standard Grade

OPTICAL SPECIFICATIONS^{1,2,3}

| | |
|--|----------------------|
| Operating Wavelength | 850 / 1310 / 1550 nm |
| Insertion Loss | < 1.6 dB |
| Loss Repeatability ⁴ | +/- 0.03 dB |
| Connection Stability ^{5,6} | +/- 0.03 dB |
| Crosstalk ⁶ | < -60 dB |
| Back Reflection | TBD |
| Optical Transition Time ^{6,7} | < 25 ms |
| Switch Lifetime ⁶ | > 1 Billion Cycles |
| Input Power Range ⁶ | Dark to +27 dBm |

- 1. All specifications are measured separately at room temperature for each Test Wavelength
- 2. Tested with Encircled flux compliant light source
- 3. Excluding connector loss. Measured with 3-jumper method or equivalent (See TIA/EIA 526-7)
- 4. Over 100 cycles
- 5. 1 Hz sampling rate for 15 min
- 6. Met by design, not measured
- 7. Optical transition time for all ports switching concurrently, not including command processing overhead

ELECTRICAL SPECIFICATIONS

| | |
|--------------------------|---|
| Module Power Consumption | 3.8 W max. Operating 6.5 W max. Start Up |
| Supply Voltage | 12V DC |
| Module Interface | 16-Pin Samtec |
| Module Control | USB, RS232, I ² C |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-----------------------|-----------------------|
| Operating Temperature | 0 to 50°C, < 85% RH |
| Storage Temperature | -40 to 70°C, < 40% RH |

MECHANICAL SPECIFICATIONS

| | |
|-----------------------------|--------------------------|
| Module Size | 142 mm x 88 mm x 22.2 mm |
| Module Weight (with fibers) | 0.42 kg |

