



# MEMS 192X192 OPTICAL MATRIX SWITCH MODULE

## SX4 Model, Single Mode Fiber, Performance Grade

### OPTICAL SPECIFICATIONS<sup>1</sup>

Operating Wavelength	1260 to 1675 nm
Insertion Loss <sup>2</sup>	< 1.0 dB
Loss Repeatability <sup>3</sup>	+/- 0.01 dB
Connection Stability <sup>4</sup>	+/- 0.01 dB
Connection Stability (Short Term) <sup>5</sup>	+/- 0.005 dB
PDL	< 0.1 dB
WDL <sup>6</sup>	< 0.3 dB
Crosstalk	< -70 dB
Back Reflection	< -50 dB
Optical Transition Time <sup>7</sup>	< 25 ms
Switch Lifetime	> 1 Billion Cycles
Input Power Range	Dark to +27 dBm

- 1. Measured separately for each Test Wavelength at 23°C
- 2. Measured with 3-jumper method or equivalent. See TIA/EIA 526-7
- 3. Over 100 cycles
- 4. 1 Hz sampling rate for 15 min
- 5. 10 KHz sampling rate for 10 sec
- 6. Test Wavelength ±20 nm
- 7. Optical transition time for all ports switching concurrently, not including command processing overhead

### ELECTRICAL SPECIFICATIONS

Module Power Consumption	23 W max. Operating 36 W max. Start Up
Supply Voltage	12V DC
Module Interface	16-Pin Samtec
Module Control	USB, RS232, I <sup>2</sup> C

### ENVIRONMENTAL SPECIFICATIONS

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

### MECHANICAL SPECIFICATIONS

Module Size	292 mm x 273.2 mm x 126.1 mm
Module Weight (with fibers)	8.65 kg

