## MEMS DUAL Nx16 MULTICAST SWITCH

DiCon's MEMS Dual Nx16 Multicast Switch is based on DiCon's proven MEMS 1xN Switch, and incorporates two Nx16 Multicast Switches for add/drop functionality in a single package. For the drop side, input signals are first broadcast via $1 \times 16$ optical splitters into 16 optical switches, which are then used to independently route network traffic from any input to any or all output ports. For the add side, each switch receives an input and selects one of the N splitters to receive traffic for broadcast to the network. The MEMS Dual Nx16 Multicast Switch is ideal for colorless, directionless and contentionless add/drop multiplexing.


## FEATURES

" Compact Form Factor
" Excellent Thermal Stability

- Proven MEMS Durability and Reliability


## APPLICATIONS

The MEMS Dual Nx16 Multicast Switch allows network operators to split and dynamically route network traffic between N inputs and 16 outputs within add/drop banks in ROADM networks. Its bi-directional feature allows for flexible and dynamic traffic routing for tomorrow's reconfigurable networks.

## MEMS DUAL Nx16 MULTICAST SWITCH

OPTICAL SPECIFICATIONS ${ }^{1}$

| PARAMETER | RATING |
| :--- | :--- |
| Insertion Loss $^{2,3,4}$ | 14.8 dB max． |
| Crosstalk $^{5}$ | -50 dB max． |
| Back Reflection | -40 dB max． |
| Switching Time | 100 ms max． |
| TDL | 0.5 dB max． |
| WDL $^{6}$ | 0.5 dB max． |
| PDL | 0.4 dB max． |
| Repeatability |  |
| Durability | 0.04 dB max． |
| Optical Power | $10^{9} \mathrm{cycles}$ min． |
| Operating Temp | 500 mW max． |
| Storage Temp | -5 to $70^{\circ} \mathrm{C}$ |
| Fiber Type | -40 to $85^{\circ} \mathrm{C}$ |
|  | $9 / 125 ~ \mu \mathrm{~m}$ single mode |

1．Specifications are without connectors．
2． IL is measured at $\mathrm{CWL}, 23^{\circ} \mathrm{C}$ ．
3．IL is for standard opaque model．
4． IL is for single－band．Dual band adds 0.2 dB ．
5．Power off isolation is same as cross talk．-35 dB max．for hitless switching．
6．WDL is measured in a $+/-20 \mathrm{~nm}$ range at $23^{\circ} \mathrm{C}$ ．
7．Repeatability is defined after 100 cycles．

## MECHANICAL DIMENSIONS

（Units：mm）


ORDERING INFORMATION

$\frac{\text { Switch Configuration }}{\text { Nx16／D } \begin{array}{r}\text { Dual } \mathrm{Nx} 16, \\ \text { Specify } \mathrm{N} \leq 8\end{array}}$

| Control Interface |  |  |
| :--- | :--- | :---: |
| I2C | $I^{2} \mathrm{C}$ |  |
| RS2 | RS232 |  |


| Wavelength Range |  |
| :--- | :--- |
| 13 | $1290-1330 \mathrm{~nm}$ |
| 15 | $1530-1570 \mathrm{~nm}$ |
| 16 | $1570-1610 \mathrm{~nm}$ |
| $13 / 15$ | $1290-1330 \& 1530-1570 \mathrm{~nm}$ |
| $15 / 16$ | $1530-1570 \& 1570-1610 \mathrm{~nm}$ |

Fiber and Jacket Type
9／BF Corning SMF－28，Bare Fiber
9／LT Corning SMF－28，Loose－Tube
Connector Type
FC／SPC FC／SPC
FC／APC FC／APC
N NONE
Also Available：SC，SC／UPC，SC／APC，ST，ST／UPC，LC
Pigtail Length
$\begin{array}{ll}1 & 1 \text { Meter } \\ \mathrm{X} & \text { Specify X Meters }\end{array}$
Tolerance is $+/-0.05 \mathrm{~m}$

