## PM MEMS ON-OFF OPTICAL SWITCH

DiCon's PM MEMS On-Off Optical Switch has one input and one output fiber and provides the ability to turn on or off the optical signal passing through it. These fiber optic switches are compact cylindrical devices driven by a direct analog voltage and are intended to be integrated into a larger optical system.

## FEATURES

- Lifetime > 1 Billion Switch Cycles
- Proven MEMS Technology
- Qualified to GR-1221
- High Reliability


## APPLICATIONS

PM MEMS On-Off Optical Switches are useful in secure optical communication applications where it is critical to control the flow of sensitive information, or in test applications where it is desired to simulate the cutting of fiber optic cables.

## PM MEMS ON-OFF OPTICAL SWITCH

OPTICAL SPECIFICATIONS¹

| PARAMETER | RATING |
| :--- | :--- |
| Insertion Loss ${ }^{2}$ | 0.8 dB max. |
| TDL | 0.30 dB max. |
| WDL $^{3}$ | 0.10 dB max. |
| Extinction Ratio | 18 dB min. |
| Repeatability ${ }^{4}$ | 0.05 dB max. |
| Optical Power | 500 mW max. |
| Durability | $10^{9} \mathrm{cycles}$ min. |
| Switching Time | $5 \mathrm{~ms} \mathrm{max}$. |
| Operating Temp | -5 to $70^{\circ} \mathrm{C}$ |
| Storage Temp | -40 to $85^{\circ} \mathrm{C}$ |
| Fiber Type | $9 / 125 \mu \mathrm{~m}$ Panda Fiber |

1. Specifications are without connectors.
2. IL is measured at CWL, $23^{\circ} \mathrm{C}$.
3. WDL is measured in a $+/-20 \mathrm{~nm}$ range at $23^{\circ} \mathrm{C}$.
4. Repeatability is defined after 100 cycles.

ELECTRICAL SPECIFICATIONS

| PARAMETER |  | RATING |
| :--- | :--- | :--- |
| Latching Type | Non-latching |  |
| Off State <br> Drive Voltage | Transparent Type | $4.5-6.5$ VDC |
|  | Opaque Type | $0-0.2$ VDC |
| Power Consumption | $20 \mu$ W max. |  |
| Vcc Damage Threshold | 10 VDC |  |

MECHANICAL DIMENSIONS
(Units: mm)


Bent Pins


