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 cycles min.
Switching Time	5 ms max.
Operating Temp	-5 to 70°C
Storage Temp	-40 to 85°C
Fiber Type	9/125 μm Panda Fiber

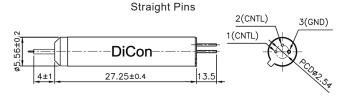
- 1. Specifications are without connectors.
- 2. IL is measured at CWL, 23°C.
- 3. WDL is measured in a +/- 20nm range at 23°C.
- 4. Repeatability is defined after 100 cycles.

ELECTRICAL SPECIFICATIONS

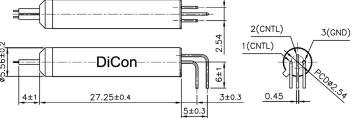
PARAMETER		RATING
Latching Type		Non-latching
Off State	Transparent Type	4.5 - 6.5 VDC
Drive Voltage	Opaque Type	0 - 0.2 VDC
Power Consumption		20 μW max.
Vcc Damage Threshold		10 VDC

MECHANICAL DIMENSIONS

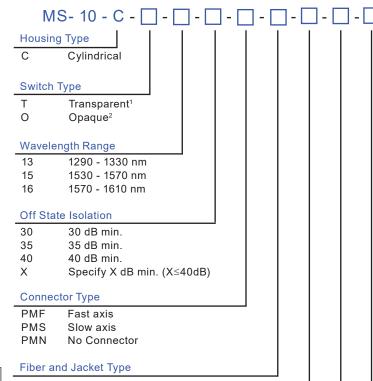
(Units: mm)



Bent Pins



ORDERING INFORMATION



2B	9/125 μm Panda fiber, 250 μm bare fiber
2/LT	9/125 μm Panda fiber, 900 μm loose tube
	over 250 μm bare fiber
4B	9/125 μm Panda fiber, 400 μm buffer
4/LT	9/125 μm Panda fiber, 900 μm loose tube
	over 400 um huffer

Connector Type

FC FC/SPC FC/APC FC/APC N NONE

Also Available: SC, SC/UPC, SC/APC, ST, ST/UPC, LC

Pigtail Length

- 1 1 Meter
- X Specify X Meters

Tolerance is +/- 0.05 m

Pin Bending

- S Straight Pins
 B Bent Pins
- 1. Minimum IL is at 0V. Off state isolation is at 4.5-6.5V.
- 2. Off state isolation is at 0V. Minimum IL is at 6-7V.