

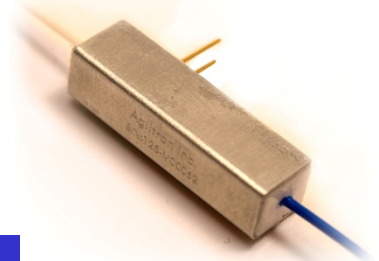
Straight Multimode MEMS Shutter/VOA

(High Attenuation)

Product Description

The MM Series shutter/VOA is based on a proprietary MEMS design, offering many desirable features. The MEMS shutter is capable of totally blocking the light, providing exceptionally large extinction. It has no optical coating or lens, enabling broad wavelength operation, as well as high power capability. This device is also low cost.

The shutter/VOA is driven with an electrical current at low voltage, and the attenuation can be continuously adjusted with the applied current or voltage. The silicon MEMS device is highly reliable with longevity. However, it can be damaged by applying voltage over the threshold.



Performance Specifications

MM Series Shutter/VOA	Min	Typical	Max	Unit
Operation Wavelength	350		2050	nm
Insertion Loss ^[1]		0.8	1.0	dB
Wavelength Dependent Loss ^[2]		0.3		dB
Temperature Dependent Loss ^[3]		0.2		dB
Attenuation Range			65	dB
Attenuation Resolution		Continuous		
Return Loss		25		dB
Response Time		8		ms
Driving Voltage ^[4]			5.2 ^[5]	V
Device Electrical Resistance		100		ohm
Optical Power Handling ^[6]			150	mW
Operating Temperature	-10		75	°C
Storage Temperature	-40		85	°C
Fiber Type	50/125, 62.5/125 MM fiber			
Package Dimension	22x5.6x6			mm

Notes:

- [1]. CPR<14, at room temperature, without connectors
- [2]. At attenuation of 20dB or less at CW ±20 nm
- [3]. At 0 attenuation and at whole temperature range
- [4]. The order of the terminals does not matter
- [5]. The device will be damaged when voltage is over this value
- [6]. High power version also available

Features

- Compact
- Broad-Band
- Low Cost
- High Reliability
- Low IL, PDL, WDL & TDL
- Low Power Consumption

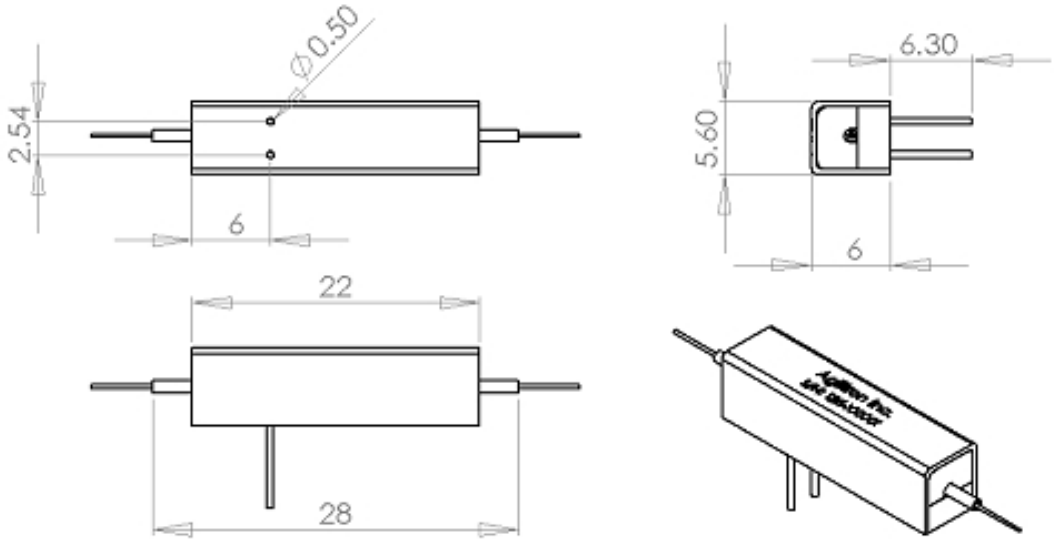
Applications

- Power Control
- Power Regulate
- Channel Balance
- Instrumentation

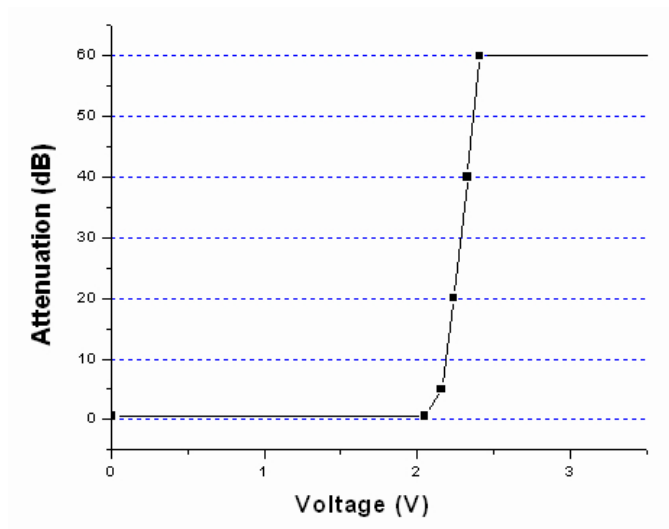


Straight Multimode MEMS Shutter/VOA

Mechanical Footprint Dimensions (mm)



Performance



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Ordering Information

SMMS -	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type	Wavelength	Off State	Package Type	Fiber Type	Fiber Length	Connector		
Voltage control=11	S+C+L=1 1060=6 1310=3 1550=5 2000=2 780=7 850=8 980=9 Special=0	Normally open =1 Normally opaque=2	Standard=1 Special=0	MM 50/125=5 MM 62.5/125=6 Special=0	Bare fiber=1 900um tube=3 Special=0	0.25m=1 0.5m=2 1.0 m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0	

