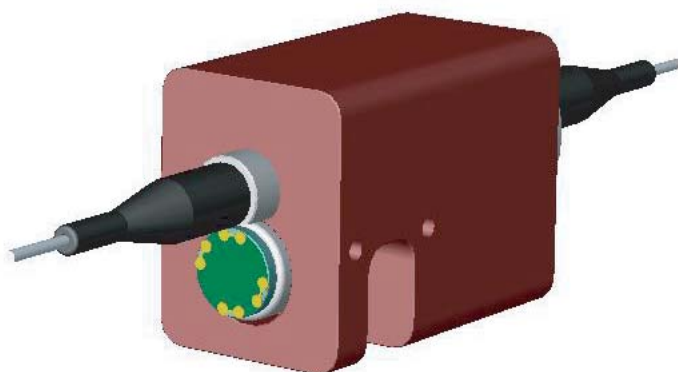




# **Polarization Maintaining Variable Optical Attenuator**



[www.princetel.com](http://www.princetel.com)

**Princetel, Inc.**  
4 Princess Rd Ste 209  
Lawrenceville, NJ 08648  
609.895.9890  
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# Polarization Maintaining Variable Optical Attenuator

## Description

Princetel offers a dual-polarizer based stepper-motor-driven PM fiber VOA that ensures a high level of state-of-polarization (SOP) stability and very small temperature effect. It also features very low initial insertion loss and high extinction ratio through out the tuning range. The precision bipolar stepper motor can be tuned at 0.9 degree step with a two-phase stepper motor driver (model number: SMD1000).

## Specifications

Wavelength	1290-1330, 1530-1570 nm
Insertion loss	<1.5 dB (0.7 dB typical)
Extinction ratio	>20 dB (25-30 dB typical)
Extinction ratio variation	<1 dB
Return loss	>50 dB (60 dB typical)
Dynamic range	>30 dB
Tuning resolution	0.9 degree (see chart next page)
Operating temperature	0 to 65 C
Storage temperature	-40 to 85 C
Optical power handling	23 dBm
Motor type	Bipolar stepper
Tuning speed	1-10 ms/step
Driving voltage	3-5 VDC
Current requirement	140 mA/3 V, 80 mA/5 V
Package Material	Aluminum/stainless steel
Fiber type	Polarization maintaining
Jacket type	400 um tight, or 900 um loose
Connector type	FC, SC, LC, FC/APC, or SC/APC
Demensions (lxwxh)	30x17x22 mm
Stepper motor driver	Princetel SMD1000

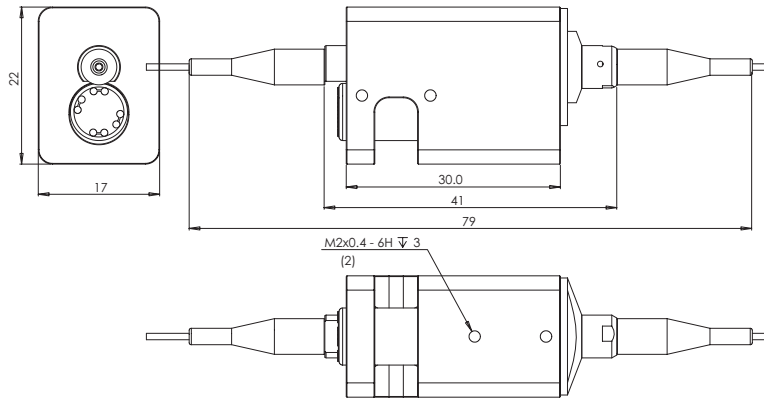
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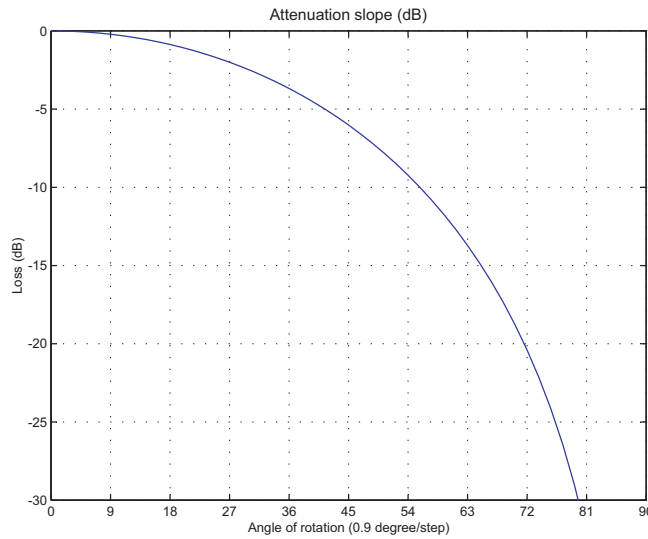


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## Mechanical



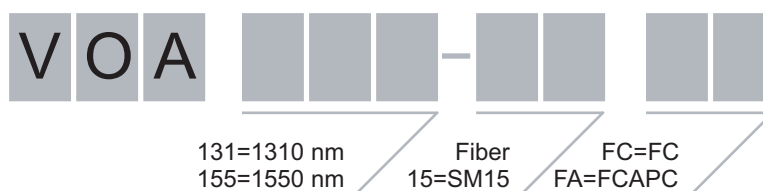
## Tuning character





# Polarization Maintaining Variable Optical Attenuator

## Part Number



## Wavelength and Fiber Code

Wavelength	Fiber
165=1625 nm	28=CorningSMF28 (1290=1650 nm)
162=1625 nm	13=Fujikura SM13 PANDA fiber
159=1590 nm	15=Fujikura SM15 PANDA fiber
155=1550 nm	56=3M FS-SN5624 (980 nm)
153=1530 nm	42=3M FS-SN4224 (850 nm)
148=1480 nm	32=3M FS-SN3224 (635 nm)
131=1310 nm	50=50/125 multimode
980=980 nm	62=62.5/125 multimode
850=950 nm	10=100/140 multimode
780=780 nm	20=200/240 multimode
670=670 nm	40=400/425 multimode
650=650 nm	60=600/630 multimode
635=635 nm	01=1000 um Mitsubishi plastic

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