

# ELECTRICALLY VARIABLE OPTICAL ATTENUATORS

## Product Description

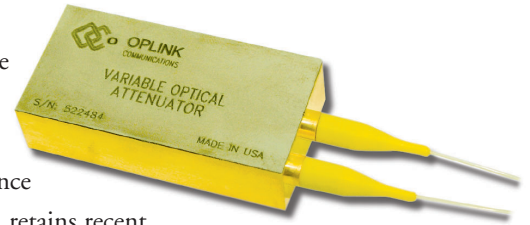
### Features

- ◆ Operates over C or L band
- ◆ 5 VDC operating voltage
- ◆ Low Insertion loss and PDL
- ◆ Latching capability
- ◆ PCB mountable

### Applications

- ◆ Pre-emphasis attenuation
- ◆ Detector input power control
- ◆ In-line power equalization
- ◆ Gain-tilt control in optical amplifiers
- ◆ On/Off switch
- ◆ Instrumentation, testing and measurement

Oplink's electrically variable optical attenuator (EVOA) is a high performance opto-mechanical device. It features a large dynamic attenuation range of >30dB and an excellent optical performance



over C- or L-band. Its latching operation retains recent attenuation setting upon removal of drive voltage. Applications include pre-emphasis attenuation, detector saturation control, in-line power equalization and amplifier power control applications. Also, it can be used to extend the dynamic range of optical measurement instruments.

Oplink's EVOA is designed to withstand the diverse environmental conditions and compliance to the Telcordia standard GR-1221.

Oplink provides customized design and packaging to meet customer-specific requirements for a variety of applications. Oplink also offers expert integration of components and modular assemblies into high-performance subsystems for equipment manufacturers worldwide.

### Performance Specifications

Parameter	Min	Typical	Max	Unit
Operating Wavelength Range	1525 ~1570 or 1570 ~1610			nm
Insertion Loss <sup>1</sup>			0.6	dB
Attenuation Range	0		30	dB
Temperature Dependent Loss <sup>2</sup>			0.15	dB
Resolution			0.15	dB
Wavelength Dependent Loss			0.2	dB
PDL	0 to 15 dB		0.1	dB
	> 15 dB		0.15	
PMD			0.1	ps
Return Loss <sup>1</sup>	55			dB
Response Speed <sup>3</sup>			0.1	sec
Actuation Type	Latching			
Optical Power			50	mW
Operating Temperature	0		70	°C
Storage Temperature	-40		85	°C
Fiber Type	SMF-28			
POT Resistance	9	10	11	KΩ
Dimension	50.0 (L) x 25.0 (W) x 12.0 (H)			mm

#### NOTES:

1. Excluding connectors.
2. Relative to 23°C.
3. At 3 dB attenuation change.

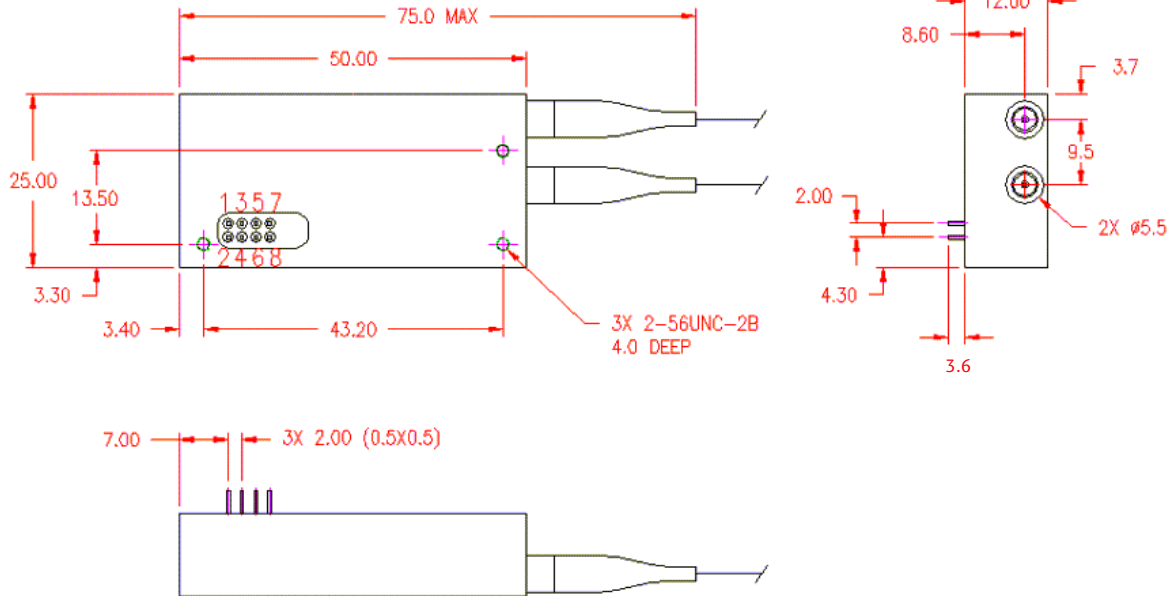
### Oplink Fiber Optic Product Lines

- ◆ Amplifier Components
- ◆ Amplifier Modules
- ◆ DWDMs
- ◆ Switching/Routing/  
Signal Conditioning

# ELECTRICALLY VARIABLE OPTICAL ATTENUATORS

## Mechanical Footprint

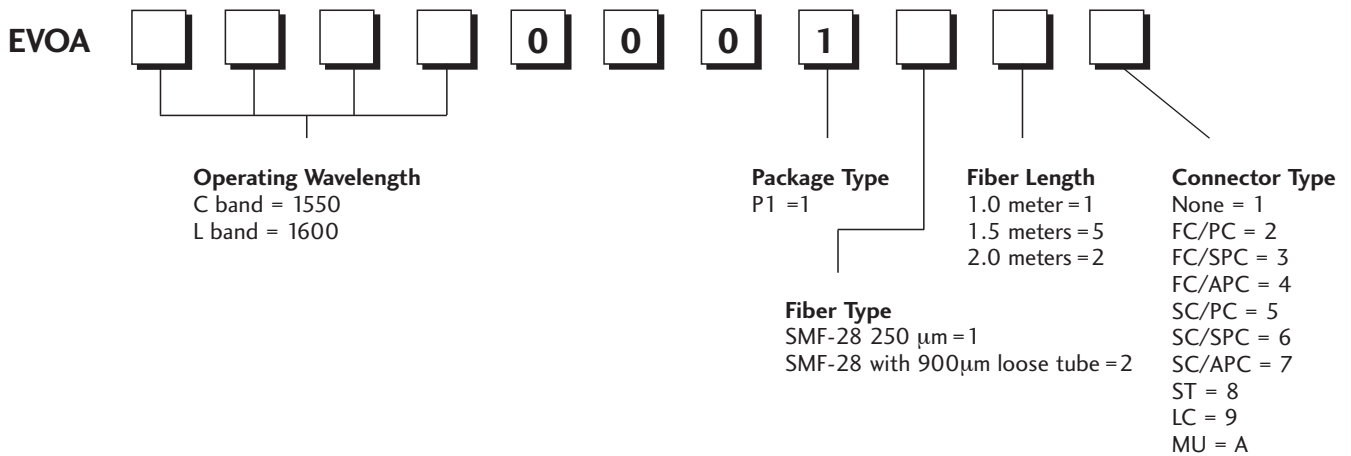
Dimension (Unit: mm)



### Electrical Connector Configuration

Pin#	Pin1	Pin2	Pin3	Pin4	Pin5	Pin6	Pin7	Pin8
Function	Motor Phase A-	Motor Phase B+	Motor Phase B-	Motor Phase A+	Pot Wiper	Pot +V	Pot GND	NC

## Ordering Information



Oplink can provide a range of customized optical solutions. For detail, please contact Oplink's OEM design team or account manager for your requirements and ordering information (510) 933-7200.



**Oplink Communications, Inc.**

46335 Landing Parkway, Fremont, CA 94538-6407

Tel: (510) 933-7200 Fax: (510) 933-7300

Email: sales@oplink.com