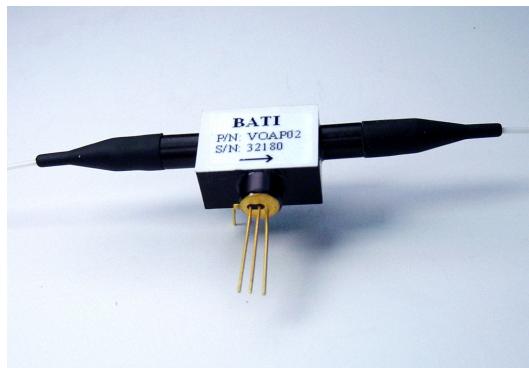


# **Eclipse™ Polarization Maintaining Variable Optical Attenuators**

*Polarization-preserving, High-speed Attenuation Control*

For the first time, polarization-preserving, high-speed attenuation is available in a compact package. Boston Applied Technologies' Polarization Maintaining Variable Optical Attenuator (PM-VOA) maintains constant polarization output regardless of wavelength and level of attenuation. Based on the revolutionary OptoCeramic® electro-optic technology, the PM-VOA achieves a very high-speed performance (typical transition time of less than 30 microseconds) in a compact solid-state device. The PM-VOA includes an integral tap/output monitor and a photo detector. This eliminates the need for an external polarization-maintaining coupler and photo detector—substantially reducing cost and space requirements.



## **Features**

- Precise, high-speed attenuation control
- Constant polarization output
- Excellent optical performance
- Integral optical monitor tap
- All solid-state construction in a compact package
- Superb temperature stability

## **Applications**

- Optical networks using polarization-maintaining fiber
- Instrumentation

## Key Optical Specifications

| Attributes <sup>1,2</sup>                     | Performance                             |
|---|---|
| <b>Wavelength Range<sup>3</sup></b>           | 1530-1565 nm                            |
| <b>Insertion Loss</b>                         | 1 dB                                    |
| <b>Dynamic Range</b>                          | 30 dB                                   |
| <b>Spectral Flatness</b>                      | 0.1 dB @ 15 dB attenuation <sup>4</sup> |
| <b>Extinction Ratio</b>                       | 20 dB                                   |
| <b>Tap Output</b>                             | 0.05 μA/μW of output power              |
| <b>Input Power</b>                            | < 500 mW                                |
| <b>Return Loss</b>                            | ≥ 55 dB                                 |
| <b>Response Time (Full Range)<sup>5</sup></b> | < 30 μs                                 |
| <b>Attenuation Resolution</b>                 | Continuous                              |
| <b>Operating Temperature Range</b>            | 0°C to 70°C                             |
| <b>Storage Temperature Range</b>              | -40°C to 85°C                           |
| <b>Dimensions (Approximately)</b>             | 29 x 12 x 8 mm                          |

### Notes:

1. Unless otherwise specified, all measurements are at 25°C.
2. Meets or exceeds Telcordia GR1221 and GR1209 specifications.
3. Also operates in the L-Band with 0.2 dB additional insertion loss.
4. For single-wavelength applications.
5. Devices with less than 5μs are also available.

## Contact Information

For more information about BATi's leadership in variable optical attenuation technology and other optical networking modules and components, visit our website at [www.bostonati.com](http://www.bostonati.com).

To obtain additional technical information or to place an order for this product, please contact us at:

Phone: 1-781-935-2800  
 Fax: 1-781-935-2860  
 E-mail: [sales@bostonati.com](mailto:sales@bostonati.com)