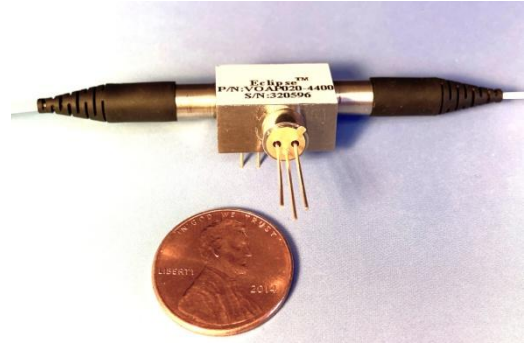


# ***Eclipse™ Polarization Maintaining Variable Optical Attenuators***

*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                             |
|-------------------------------|---|
| Wavelength Range <sup>3</sup> | 1530-1565 nm                            |
| Insertion Loss <sup>4</sup>   | 1 dB                                    |
| Dynamic Range                 | 25 dB                                   |
| Spectral Flatness             | 0.1 dB @ 15 dB attenuation <sup>5</sup> |
| Extinction Ratio              | 20 dB                                   |
| Tap Output                    | 0.05 $\mu$ A/ $\mu$ W of output power   |
| Input Power                   | < 300 mW                                |
| Return Loss                   | $\geq$ 55 dB                            |
| Response Time (Full Range)    | < 30 $\mu$ s                            |
| Attenuation Resolution        | Continuous                              |
| Operating Temperature Range   | 10°C to 70°C                            |
| Storage Temperature Range     | -40°C to 85°C                           |
| Dimensions (Approximately)    | 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. 0.4 to 0.5dB additional IL with each spliced connector
5. For single-wavelength applications.

## 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:

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