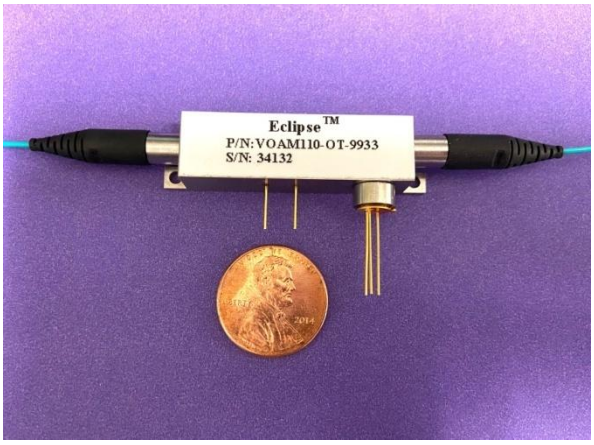
# Eclipse™ Multimode Variable Optical Attenuator

## High-Speed Attenuation Control

Boston Applied Technologies' Eclipse™ Multimode Variable Optical Attenuators (MM-VOAs) maintain a constant output optical power in the multimode fiber transmission line, regardless of the wavelength and the level of attenuation. Based on the revolutionary OptoCeramic® electro-optic technology, the MM-VOAs achieve very high-speed (with typical transition time in microseconds) in a compact solid-state device. The MM-VOAs with integrated output tap (photo detector) are also available to eliminate the need of an external optical power detection component, substantially reducing the cost and space requirements.




**Features**

- Precise, high-speed attenuation control
- Multimode fiber with low mode dependent loss
- Excellent optical performance
- All solid-state construction in a compact package
- Superb temperature stability

**Applications**

- Optical power control in multimode optical system
- Instrumentation

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## Key Optical Specifications

| Attributes[1,2] | Performance |
|---|---|
| Wavelength Range[3] | 1530-1565 nm[4] |
| Insertion Loss[5] | <1 dB |
| Dynamic Range | >20 dB |
| Input Power | < 300 mW |
| Return Loss | ≥ 40 dB |
| Operating Temperature Range | 10°C to 70°C |
| Storage Temperature Range | -40°C to 85°C |
| Dimensions (Approximately) | 34.5 x 11 x 9 mm[3] |
| Response Time (Full Range) | < 30 μs |
| Attenuation Resolution | Continuous |
| Voltage Requirement | +5 VDC |
| Control Voltage[6] | 0 to 5 VDC |
| Power Consumption | 0.5 W |

***Notes:***

1. Unless otherwise specified, all measurements are at 25°C.
2. Designed to 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. Measured without connectors. Each tap with ~0.3 dB additional insertion loss.
6. The 0~5V control signal, amplified by the driver electronics, controls the optical power/attenuation.

### For More Information

For more information about Boston Applied Technologies' leadership in variable optical attenuation technology and other optical networking modules and components, visit our website at www.bostonati.com.

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

Phone: 1-781-935-2800

Fax: 1-781-935-2860

E-mail: sales@bostonati.com