

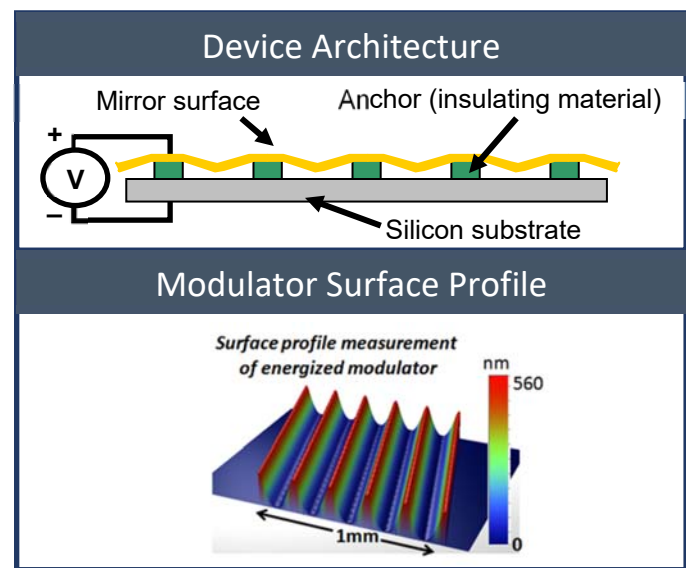
Features

- High throughput in the VIS to Mid IR
- No polarization effects
- Response times as low as 2 μ s

The Broadband Optical Modulator is a reflective diffraction grating with controllable groove depth which modulates intensity by switching between an unpowered flat mirror-state and a powered diffractive-state.

Each device is designed for optimal performance up to its maximum deflection over a range of wavelengths. To attain peak extinction, the user simply tunes the deflection at a given wavelength.

Modulators are designed to be operated using a well-conditioned high voltage source. BMC's MB-200 Driver is well suited to operate the device at frame rates of up to 200kHz. Contact BMC for more details.



Device Specifications

	<i>BOM-550-2</i>	<i>BOM-550-3</i>
Rise/fall time: 90%-10% (μ s)	<2	<3
Rise/fall time: 97%-3% (μ s)	<3	<5
Peak Extinction ratio (at 632 nm)* [†]	200:1	
Optimal Wavelength Range (nm)* [†]	600-1100	
Angle-of-Incidence for peak extinction (°)	<10	
Max. Extinction Frequency Limit -3dB (kHz)*	100	
Active Aperture (mm) [†]	6.0	
Total reflected wavefront error (P-V)	$\lambda/4$	
Maximum operating voltage (V)	150	
Protective window angle [†]	10°	
Protective window size (inch) [†]	1	
Protective window thickness (mm) [†]	5	

*Devices are tested at the listed conditions. For other wavelengths and angles of incidence, performance may be different.

[†]Custom options available.