

Free-space AOM (Acousto-Optic Modulator)

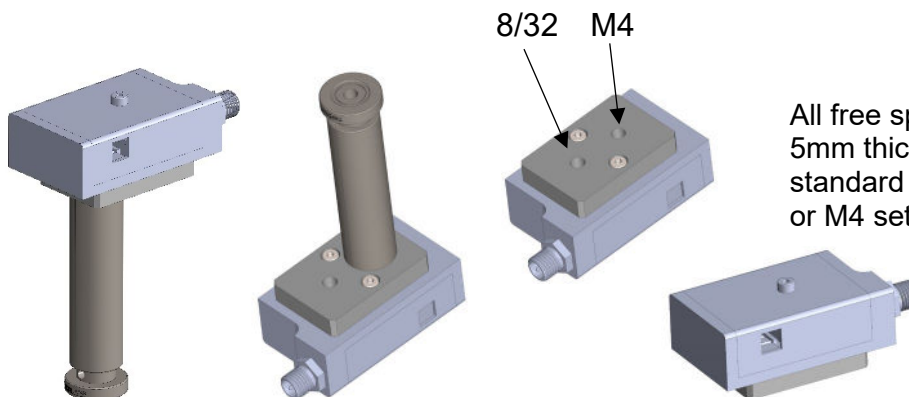
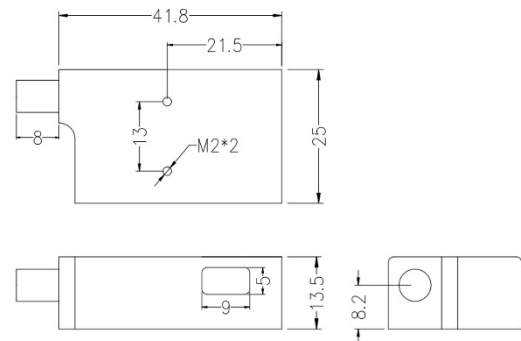
Standard 100 MHz version – 850 nm

Reference: 850FSAOM-100-1.0

Technology/Crystal: TeO2*

| SPECIFICATIONS | Unit | Min | Typ. | Max | Comments |
|---|--------------------|--------------|------|-----|--------------|
| AOM Material | | | TeO2 | | |
| Wavelength | nm | 670 | 850 | 970 | Customizable |
| RF Frequency | MHz | | 100 | | |
| Active Aperture | mm | | 1.0 | | |
| Input impedance | Ω | | 50 | | |
| Frequency shift | MHz | | 100 | | |
| RF Power | W | | 1.5 | | |
| Max Optical Input CW/average Power | W | | | 15 | |
| Max Optical Power/surface | MW/cm ² | | | 50 | |
| Efficiency (optimized beam conditions) | % | 85 | 88 | | |
| Rise/fall time (beam 500 μm) | ns | | 82 | | |
| Rise/fall time (beam 200 μm) | ns | | 33 | | |
| Crystal coating transmittance (per surface) | % | 99.5 | | | |
| Electrical input interface | | | SMA | | |
| Working temperature | °C | -20 | | 60 | |
| Storage temperature | °C | -30 | | 70 | |
| Dimensions | mm ³ | 41.8*25*13.5 | | | |
| Mounting holes diameter | mm | | 2*M2 | | |
| Diffraction Angle = $\lambda \cdot f / V$ (with : λ : wavelength (in nm) ; f : RF frequency (in MHz) ; V=4200) | mrad | | 20.2 | | |

*: See our tutorial: [fiber modulator](#)



All free space AOMs are supplied with a 5mm thick adapter plate compatible with standard pedestal bases with either 8/32 or M4 setscrews.