

# AO Modulator

## M111-2J-AV1

### Features

- 1520 to 1630nm
- 111MHz drive frequency
- 60ns rise-time

### Description

A free-space acousto-optic modulator appropriate for use either intra-cavity or extacavity, for example to Q-Switch or modulate erbium doped fibre lasers.

Broadband anti-reflection coatings, combined with top grade tellurium dioxide, guarantee excellent throughput and beam quality. Special design and high quality manufacturing processes result in superior efficiency with excellent extinction ratio.



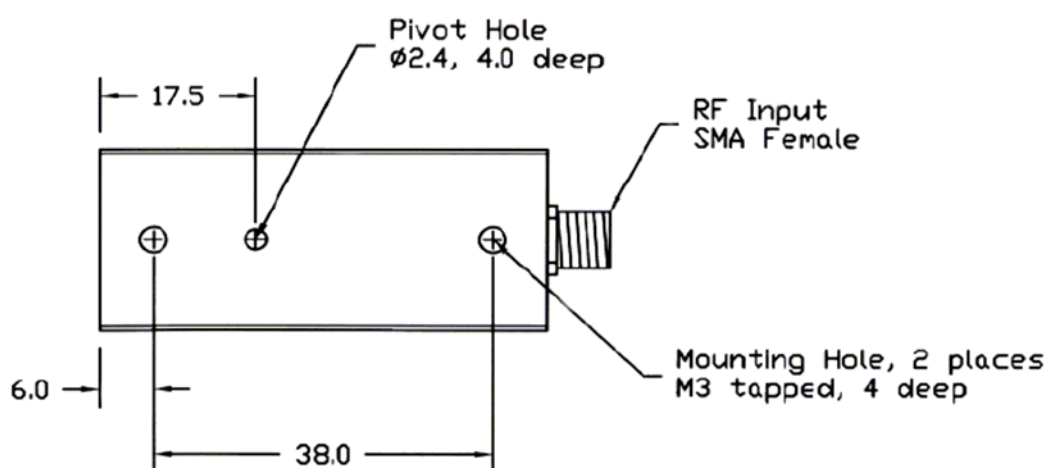
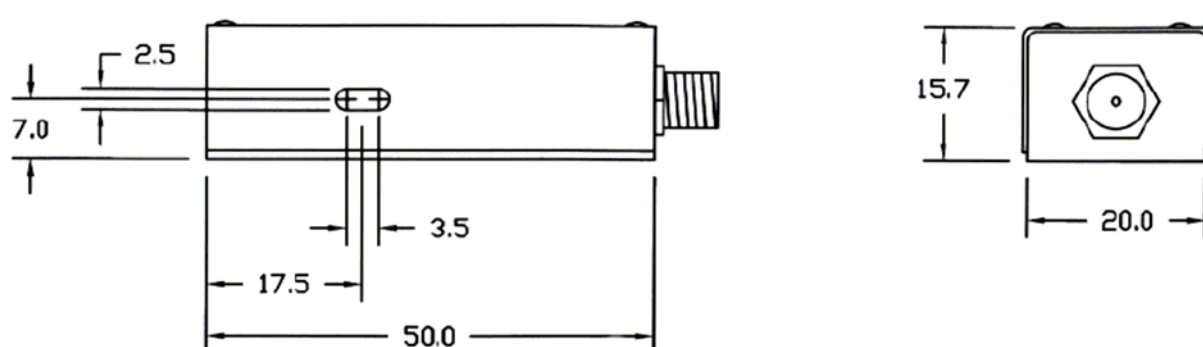
### Specification

Interaction Material:	Tellurium Dioxide
Acoustic Mode:	Isotropic, compressional
Wavelength:	1520nm to 1630nm
Transmission:	> 97%
Damage Threshold:	>10MW/cm <sup>2</sup> Pulsed, >50KW/cm <sup>2</sup> CW
Polarisation:	Any
Frequency:	111MHz
VSWR:	< 1.2:1 (50Ω Input Impedance)
Active Aperture:	0.65mm
Separation Angle:	39 to 43mrad, wavelength dependant
RF Power:	3.5W
Operating Temperature:	+10 to +60°C
Storage Temperature:	- 15 to +65°C
Performance with a 400μm diameter, linearly polarised beam:	
Rise-Time / Fall-Time:	61ns
Modulation Bandwidth:	8.2MHz
Extinction Ratio:	> 40dB
Diffacted Beam Ellipticity:	< 20%
Diffraction Efficiency:	> 85%

### Driver Selection

Digital and Analogue Modulation:	A344
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## Mechanical Dimensions



Dimensions in mm