

# 1206C-2-1002

## Acousto-Optic Modulator



0114

The Model 1206C-2-1002 is designed primarily for use in applications requiring very high output good beam quality and high beam pointing stability e.g. holographic mastering.

### SPECIFICATIONS

Interaction Material:	TeO <sub>2</sub> (Longitudinal Mode)
Standard Operating Wavelengths:	360 – 420nm , 442 - 488nm
Polarization:	Vertical preferred
Acoustic Velocity:	4200 m/s
Active Aperture:	2mmH x 9mmW
Centre Frequency:	110 MHz
RF Bandwidth:	50 MHz
Input Impedance:	50 ohms (Nominal)
VSWR:	< 1.5:1 @ 110 MHz
DC. Contrast Ratio:	> 1000:1 min (2000:1 typical)

### PERFORMANCE

Wavelength:	360nm	405nm	442nm	488nm
Static Insertion Loss:	≤7.0%	≤4.0%	≤3.0%	≤3.0%
RF Power:	≤0.4W	≤ 0.6W	≤ 0.6W	≤ 0.7W
Separation Angle @ 110 MHz:	9.4mrad	10.6mrad	11.6mrad	12.8mrad
Bragg Angle @ 110MHz:	4.7mrad	5.3mrad	5.8mrad	6.4mrad
Beam Diameter (width):	<b>180um</b>	<b>1mm</b>	<b>2mm</b>	<b>(9mm)</b>
Diffraction Efficiency:	>80.0%	>85.0%	>85.0%	>85.0%
Rise Time (modulator use)	30ns	150ns	300ns	
Max angular resolution (deflector use)			24	100

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

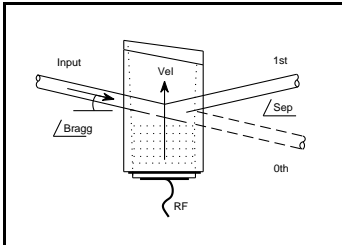
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#### Quality Assured.

In-house: Crystal Growth,  
Optical Polishing,  
A/R coating, Vacuum Bonding



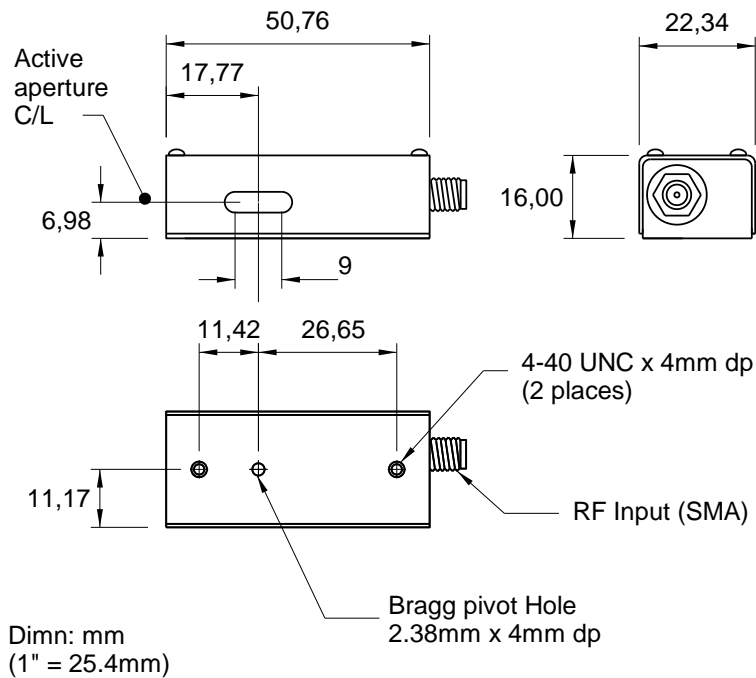
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### OUTLINE DRAWING



#### Options:

-M = M3 metric mounting screws

### DRIVERS

523C-L (Digital Modulation), 15Vdc  
523C-2 (Digital Modulation), 24Vdc

620C-100 (Variable Frequency & Digital Modulation)

533C-L (Analog modulation), 15Vdc  
533C-2 (Analog modulation), 24Vdc

630C-100 (Variable frequency & Analog Modulation)

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