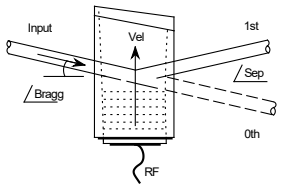


OAM1415-T40S-2

AO Frequency Shifter

(Off axis)

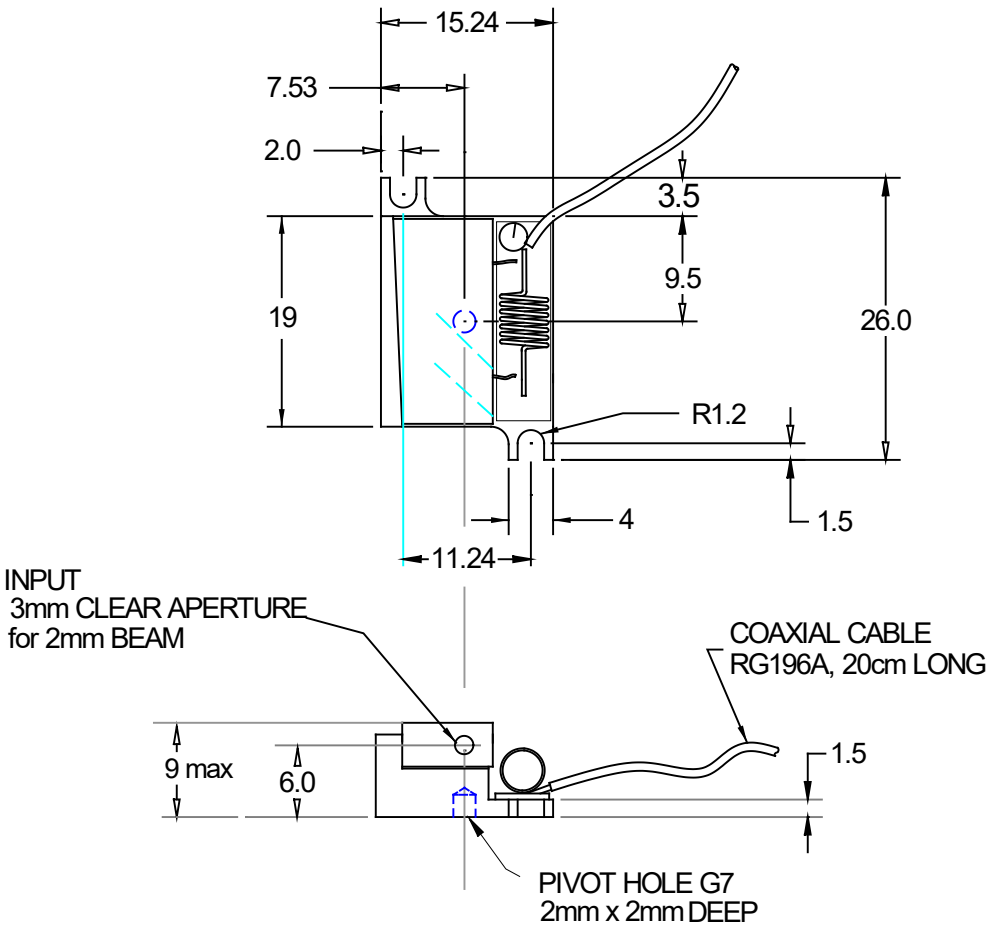
1921

The OAM1415-T40S series is a compact 40MHz AOM specifically designed for acousto-optic frequency shifting. These devices have a preferred orientation and input polarization. The diffracted output polarization is rotated.

FEATURES
Small Size
Low Drive Power

DRIVERS
Model 521C-L (Digital)
Model 531C-L (Analog)

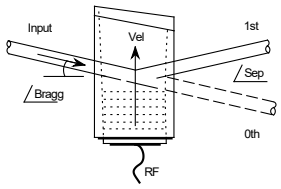
OUTLINE DRAWING



Coax cable can be supplied terminated in SMA connector

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
ISOMET CORP, 10342 Battleview Parkway, Manassas, VA 20109, USA.
Tel: (703) 321 8301 Fax: (703) 321 8546
E-mail: ISOMET@ ISOMET.COM ***Web Page: WWW.ISOMET.COM***

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



OAM1415-T40S-2

AO Frequency Shifter

(Off axis)

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SPECIFICATIONS

Operating Wavelength:	Please specify single wavelength within A/R range
A/R options	400-700nm , 633-830nm
Interaction Material:	Slow Shear TeO_2
Acoustic velocity	0.664mm/usec
Active Aperture:	2mm
Center Frequency (fc):	40MHz
Diffraction bandwidth	+/- 1MHz for 10% loss in efficiency
Input Impedance:	50 Ohms (nominal)
VSWR:	<1.5:1 @ fc
Diffraction Efficiency:	>85%
Insertion Loss:	<3%

PERFORMANCE vs. WAVELENGTH

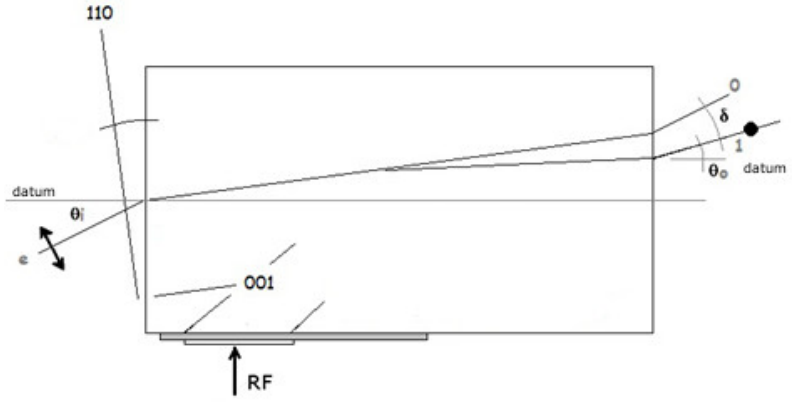
Wavelength:	**460nm**	**633nm**	**690 nm**	**810 nm**
Maximum RF Drive Power:	110mW	200mW	240mW	330mW
Typical RF Drive Power:	40mW	70mW	75mW	120mW
Input angle θ_i: (+/-10%)	7.5 deg	5.5 deg	5.2 deg	4.8 deg
Output angle θ_o: (+/-10%)	5.9 deg	3.3 deg	2.8 deg	2.0 deg
Beam Separation δ:	1.6 deg	2.2 deg	2.4 deg	2.8 deg

Input polarization: Horizontal

Outputs, polarization:

Zero order Horizontal

First order Vertical



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