

OAM1415-T80S-2



AO Frequency Shifter (Off axis)

1921

The OAM1415-T80S series is a compact 80MHz AOM specifically designed for acousto-optic frequency shifting. These devices have a preferred orientation and input polarization. The diffracted output polarization is rotated.

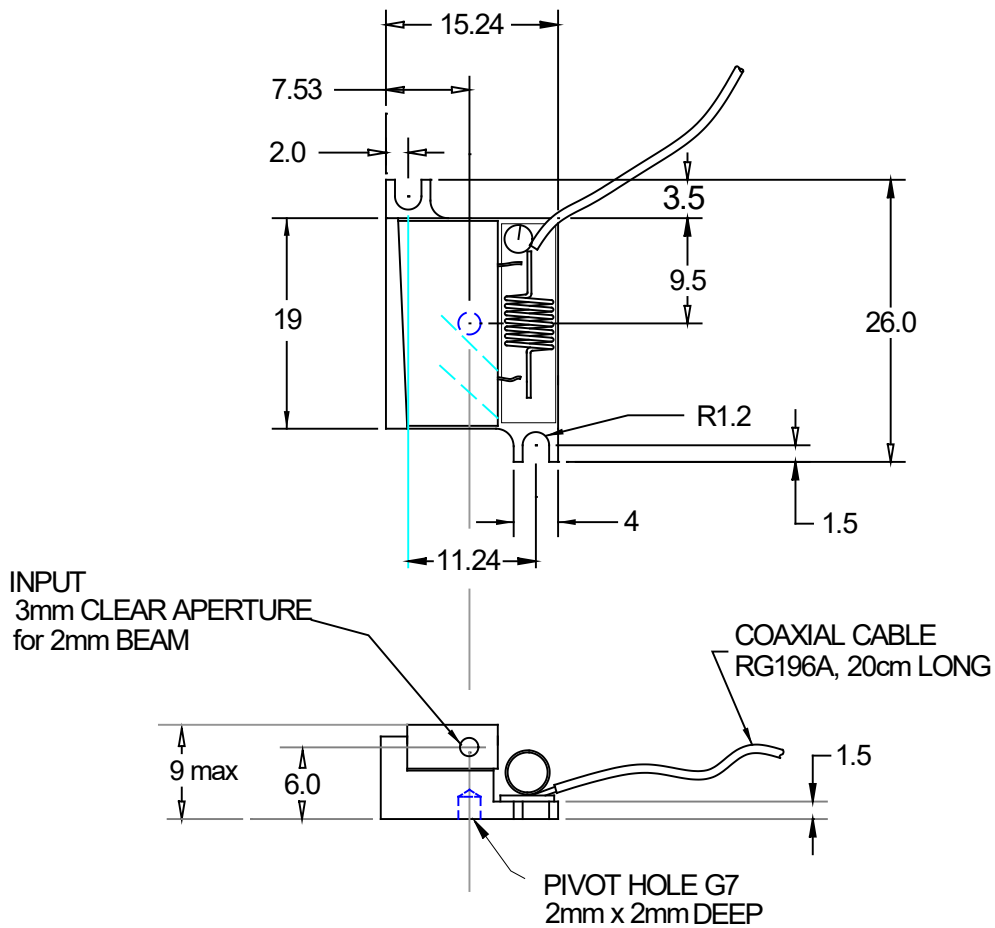
FEATURES

- Small Size
- Low Drive Power

DRIVERS

- Model 522C-L (Digital)
- Model 532C-L (Analog)

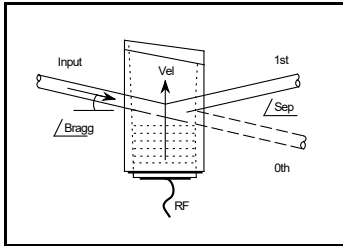
OUTLINE DRAWING



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



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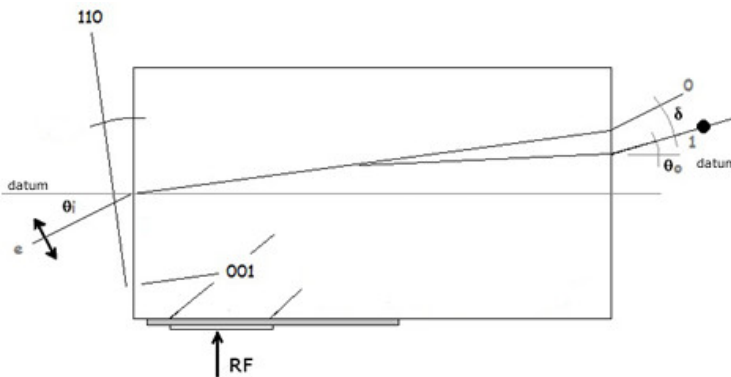
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SPECIFICATIONS

Operating Wavelength: A/R options	Please specify single wavelength within A/R range 400-700nm , 633-830nm
Interaction Material:	Slow Shear TeO ₂
Acoustic velocity	0.664mm/usec
Active Aperture:	2mm
Center Frequency (fc):	80MHz
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
<u>Maximum</u> RF Drive Power:	110mW	200mW	240mW	330mW
Typical RF Drive Power:	40mW	70mW	75mW	120mW
Input angle θ_i : (+/-10%)	5.7 deg	4.7 deg	4.6 deg	4.55 deg
Output angle θ_o : (+/-10%)	3.2 deg	0.3 deg	-0.2 deg	-1.05 deg
Beam Separation δ :	2.5 deg	4.35 deg	4.8 deg	5.8 deg
Input polarization:	Horizontal			
Outputs, polarization:	Zero order	Horizontal		
	First order	Vertical		



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