

# OAD948-T70S-3 (633nm)



## Acousto-Optic Deflector

Off-Axis

4822

The OAD948 offers high diffraction efficiency over a wide scan angle at 633nm. Specific input beam polarization and orientation are required for correct operation

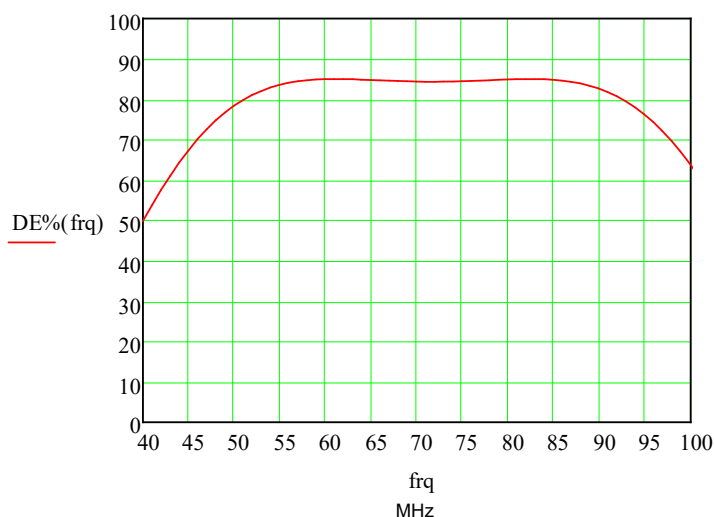
### SPECIFICATIONS

|                                    |                                  |
|------------------------------------|----------------------------------|
| Operating Wavelength:              | 633nm                            |
| Interaction Material:              | TeO <sub>2</sub> (Off-Axis Mode) |
| Acoustic Velocity:                 | 651m/s                           |
| Active Aperture:                   | 3mm H x 8mm L                    |
| Centre Frequency (f <sub>c</sub> ) | 70MHz (nominal)                  |
| RF Bandwidth (Δf)                  | 50MHz                            |
| Input Impedance:                   | 50Ω (nominal)                    |
| VSWR:                              | < 2.5:1 across Δf                |
| Access Time (τ):                   | 12.3μs                           |
| τΔf Resolution:                    | > 600 Spots                      |
| Laser Polarization:                | Linear, Horizontal               |

### PERFORMANCE

|                                       |                |
|---------------------------------------|----------------|
| Wavelength:                           | 633nm          |
| RF Drive Power (Watts):               | < 0.7W         |
| Input Angle (f <sub>c</sub> = 70MHz): | 4.2° (nominal) |
| Beam Separation:                      | 4.6°           |
| Scan Angle (ΔF = 40 MHz):             | 2.3°           |
| Diffraction Efficiency                | ≥80%           |

### ESTIMATED FIRST ORDER DIFFRACTION EFFICIENCY RESPONSE



**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

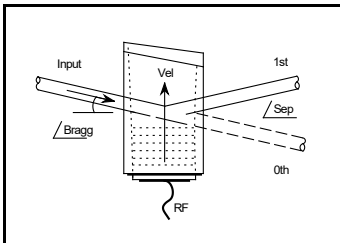
E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

**Quality Assured.**

**In-house: Crystal Growth,**

**Optical Polishing,**

**A/R coating, Vacuum Bonding**



# OAD948-T70S-3 (633nm)

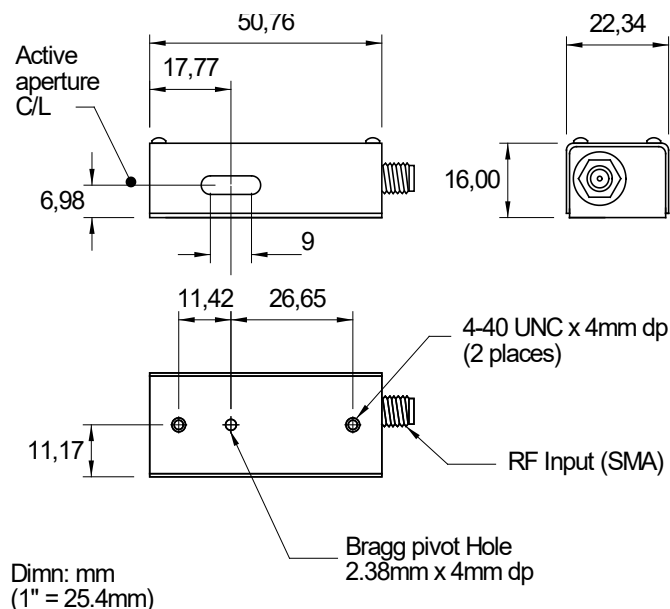


## Acousto-Optic Deflector

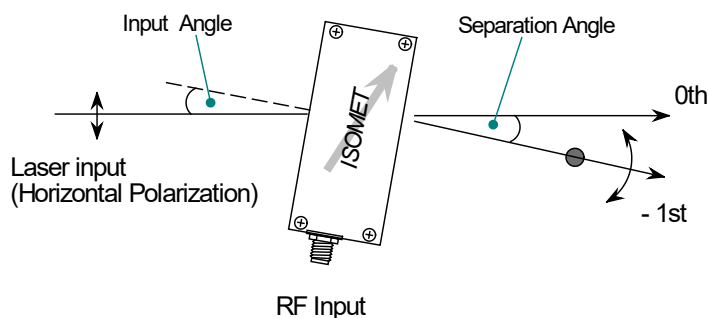
Off-Axis

4822

### OUTLINE DRAWING



### ORIENTATION



### RECOMMENDED DRIVERS

iMS4-L Synthesizer with 802F-L Amplifier  
or  
620C / 630C-80 Variable Frequency Driver

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

#### Quality Assured.

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