

ODXY1441CL-T70S-3

Acousto-Optic Deflector

Off-Axis



5125

The ODXY1441 dual axis deflector offers high diffraction efficiency over a wide scan angle for red wavelength range. Specific input beam polarization and orientation are required for correct operation. The crystal faces are polished to provide nominal colinear operation (Centre of X-Y scan colinear with input beam path). To facilitate alignment, both X and Y axis crystals are fitted with user adjustable Bragg angle mounts.

SPECIFICATIONS

Operating Wavelength:	633nm - 640nm
Interaction Material:	TeO ₂ (Off-Axis Mode)
Active aperture:	3.5mm H x 3.5mm L
Centre Frequency (f _c)	See table (+/- 10% for best efficiency across Δf.)
RF Bandwidth (Δf)	> 40MHz
Input Impedance:	50Ω (Nominal)
VSWR:	< 2.5:1 across Δf
Access Time (τ):	5.3μs
τΔf Resolution:	> 200 x 200 resolvable Spots
Input Laser Polarization:	Linear, Vertical

PERFORMANCE

Wavelength:	633nm	660nm
RF Drive Power	0.9W	1.0W
Centre frequency f _c	67MHz	65MHz
Diffraction Bandwidth ΔF	40MHz min.	35MHz min.
Scan Angle over ΔF:	2.2° x 2.2°	2.0° x 2.0°

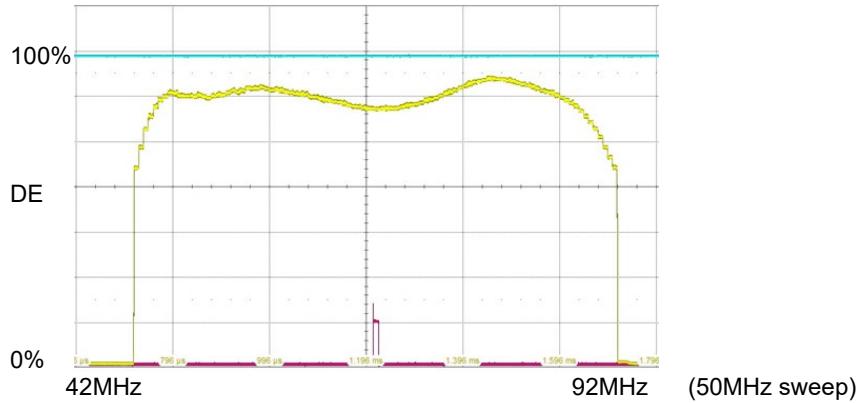
Input Angle: 0° nominal (+/- 1deg)

Zero order beam Separation @ f_c: ~3.8°

Insertion Loss: < 5%

Total Diffraction Efficiency, X-Y: ≥ 60%

Typical Diffraction Efficiency Response PER AXIS (633nm)



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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

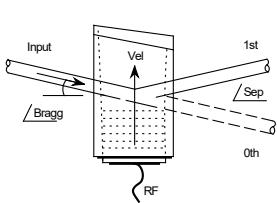
Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: Crystal Growth,
Optical Polishing,

A/R coating, Vacuum Bonding



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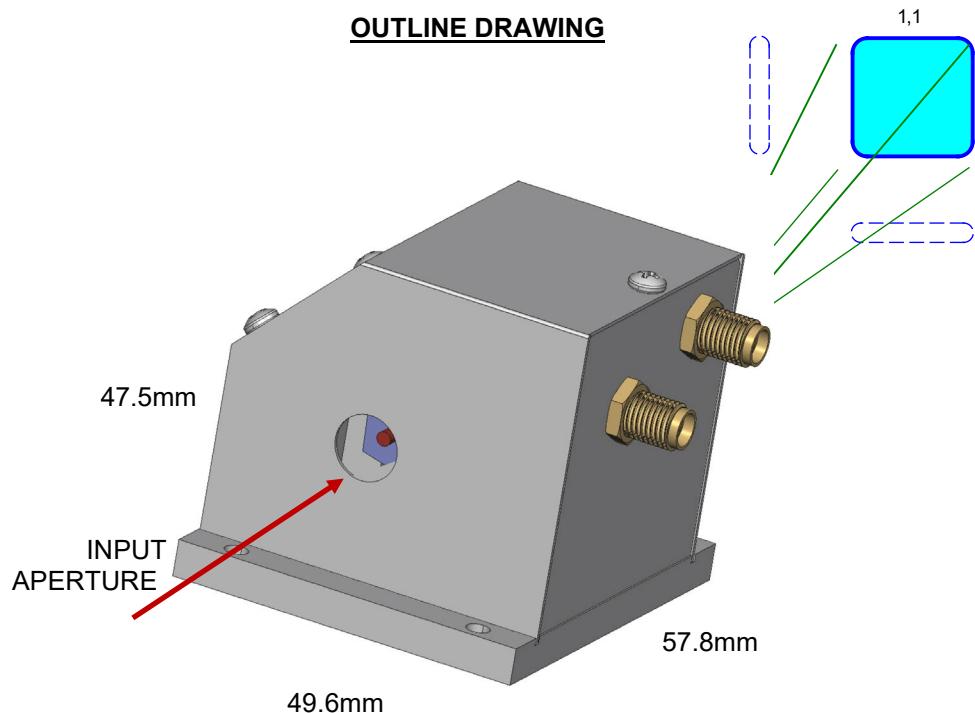
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OUTLINE DRAWING



Input to Y-axis, output from X-axis
Input beam axis 23mm above mounting surface, 28.5mm from RF connector face

RECOMMENDED DRIVERS

iCSA-100T-2-1 compact synthesizer with integrated amplifiers.

-or-

iMS4-P synthesizer plus AG0-100T-1 amplifiers (x2)

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