

# OAD1550-XY

## Dual Axis AO Deflector Off-Axis



1106

The OAD1550-XY offers high throughput efficiency over a wide scan angle at 1.55um. This deflector has been designed for simplicity and consists of two AO deflector crystals mounted orthogonally in one case. There is no requirement for input or intervening optics between the crystals.

### PRELIMINARY SPECIFICATIONS

Operating Wavelength:	1.55um
Interaction Material:	TeO <sub>2</sub> (off-axis)
Acoustic Wave:	Shear
Acoustic Velocity:	689m/s
Center Frequency (f <sub>c</sub> ):	40MHz
RF Bandwidth:	20MHz
Scan Angle/Axis (degrees):	2.3
Input Polarization (Required):	Linear, horizontal w.r.t. base
Output polarization:	Linear, horizontal w.r.t. base
Active Aperture:	7mm x 7mm
f <sub>c</sub> Separation Angle/Axis:	89.9mrad
Max RF Power:	2.7W/axis (nominal)
Input impedance:	50 ohm
Access Time:	10.2usec
Resolution:	>200 x 200
Minimum throughput efficiency:	>70%/axis, >50% total (nominal)
Diffraction response (relative)	See reverse

### RECOMMENDED DRIVERS

2 SETS OF:

iDDS-1SE Frequency Synthesizer plus 503C-1 Amplifier  
or  
620C / 630C-40 Variable Frequency Driver

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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

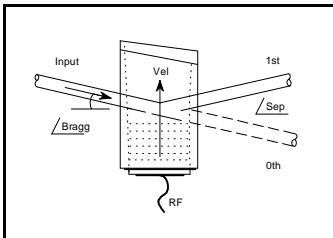
E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

Quality Assured.

In-house: Crystal Growth,

Optical Polishing,

A/R coating, Vacuum Bonding



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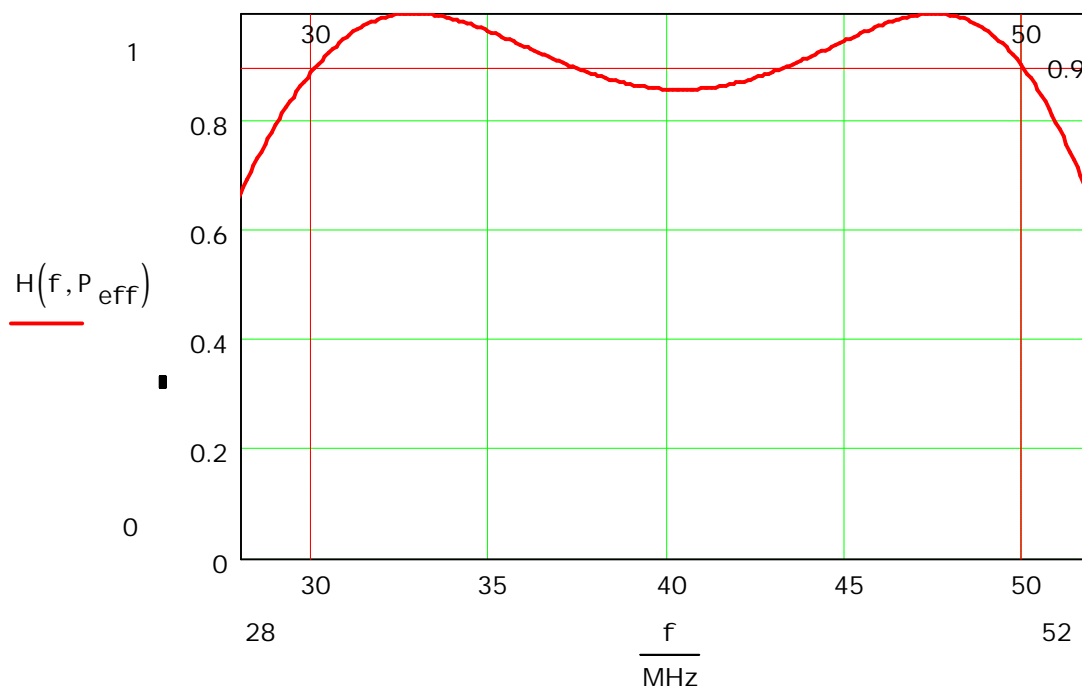
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### Relative Diffraction Response vs Frequency (per axis)

Typical Peak efficiency 85%



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