

DXY1208-G50L-3

IR Dual Axis AO Deflector

(Preliminary)



0321

SPECIFICATIONS

Standard A/R Spectral Range:	9.4 μ m or 10.6 μ m "V" coat (9 -11 μ m option available)
Interaction Medium:	Single Crystal Germanium
Acoustic Velocity:	5.5mm/ μ s
Centre Frequency (fc):	50MHz
RF Bandwidth (Δ f):	20MHz
Input Impedance:	50 Ω
Input VSWR:	< 1.5:1 at 50MHz
Optical Insertion Loss:	< 5% per axis
Reflectivity (average across range):	< 0.7%/Surface
Laser Polarization:	Linear horizontal, parallel to scan axis. Half wave plate required between the X and Y axis. Mount is provided. Contact Isomet regarding half wave plate.
Active Aperture:	3 mmH x 3 mmL
Water Cooling (minimum):	2 litre/minute at < 20°C

TYPICAL PERFORMANCE

<u>Input beam diameter:</u>	<u>3mm</u>
Optical access time:	0.55 μ s
Diffraction Efficiency:	> 80% per axis
Optical Power:	50 Watts CW *
Rayleigh spot resolution	10 x 10
<u>Wavelength:</u>	<u>10.6μm</u>
RF Drive Power:	< 65W per axis
Bragg Angle (mrad):	48.2
Separation Angle (mrad):	96.4
Scan Angle (mrad):	38.5

* For higher powers please contact Isomet

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

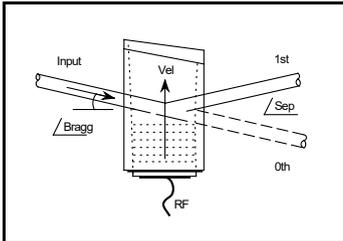
ISOMET CORP, 10342, Battleview Parkway, Manassas, USA.

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



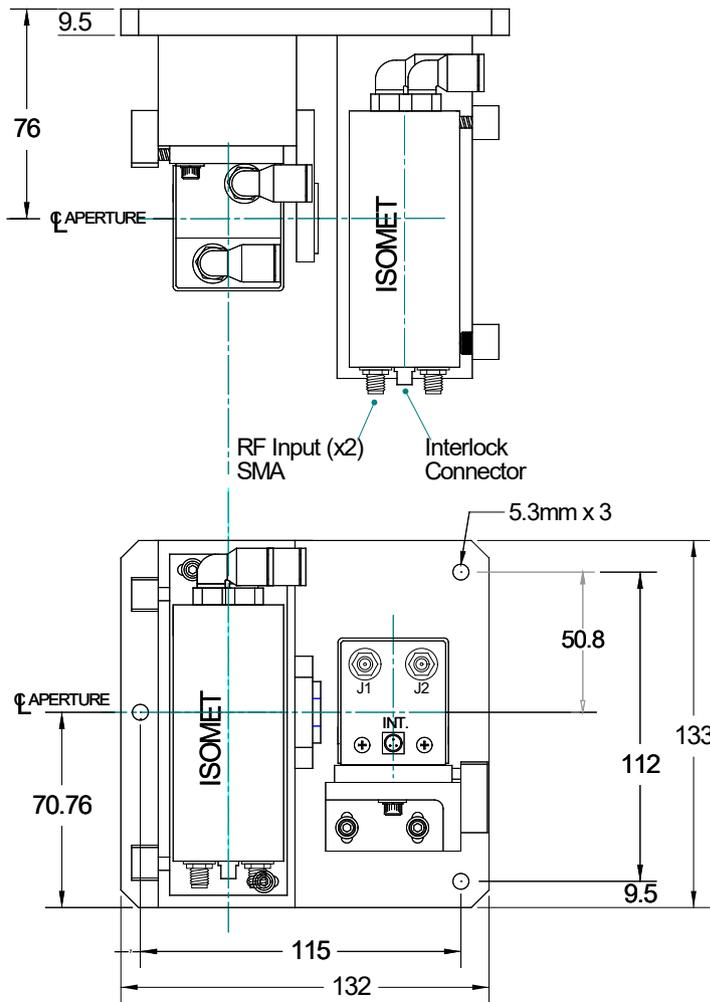
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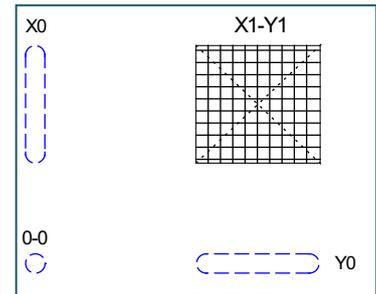


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OUTLINE DRAWING Dimensions:mm



Output Beams



Due to RF drive power dissipation, the D1208 requires water-cooling to prevent thermal runaway (>2L/min at < 20degC).

The integral NC thermal interlock switch opens at 32 deg C. The water cooled case parts are aluminium. It is strongly recommended that a corrosion inhibitor is added to the cooling system.

DRIVER OPTIONS

RFA331-2 VCO Driver/Amplifier (one per axis)
or
ims4-L (or -P) synthesizer plus RFA050-4-40 amplifier

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