

D1435-G50L-9 High Power AO Deflector



rev-0 2922

APPLICATIONS

- Material Processing
- Via Hole Drilling
- Surface texturing

FEATURES

- Low loss
- High Optical Power
- All Solid-State

The D1435-G50 series are low loss multi-spot deflector/modulators optimized for duty cycled applications and designed to minimize thermal lensing and reduce beam degradation at high optical powers.

SPECIFICATIONS (TYPICAL)

Operating Wavelength: 9.3um, 9.4um or 9.6um (specify)

Interaction Material: Germanium

Active Aperture : 9mm High x 15mm Wide
Clear Aperture : 12.7mm High x 20mm Wide

Centre Frequency (fc): 50MHz RF Bandwidth: 20MHz

Recommended duty cycle < 40%,

Maximum duty cycle 100% with caution

RF Power for Max. DE < 180 Watts peak total (9.4um)

Static Insertion Loss: < 5%

Maximum Optical Power: 600 Watts, 7mm dia. Gaussian beam

Laser Polarization: Linear, Horizontal

Water Cooling (Minimum): > 2 Liters/Minute @ < 20°C

Dual Spot Performance at 9.4um

Bragg Angle at 9.4um: 42.7 mrad, nominal

Separation Angle at 9.4um: 68.4 mrad (40MHz), 102.5 mrad (60MHz)

Optical Rise Time 0.12usec / mm beam diameter

Diffraction Efficiency (DE) > 85%, 90% typical

RF DRIVERS

D1435: Copper case parts (standard)

Fixed dual frequency: RN5BR-4060-2-90 Programmable Synthesizer: iSPA4060-2-BR

D1435A: Aluminium case parts (option)

Fixed dual frequency: RN5-4060-2-90 Programmable Synthesizer: iSPA4060-2

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

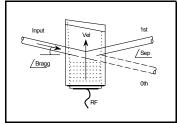
ISOMET CORP, 10342, Battleview Parkway, Manassas, VA20109, USA.

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



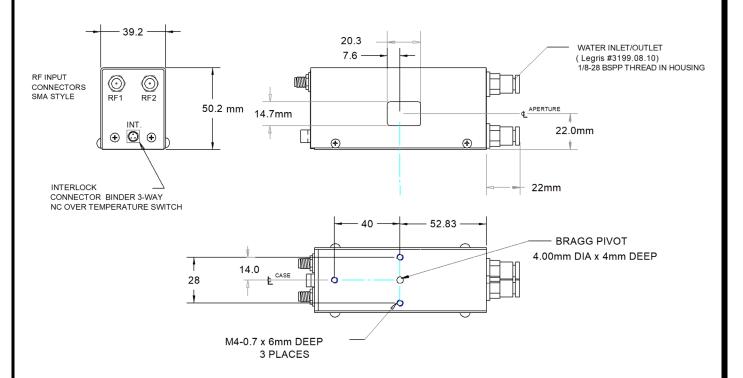
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OUTLINE DRAWING

Dimensions: mm



Refer application note AN1906 regarding Coolant Specification

Options

D1435(A): Case parts in contact with coolant are fabricated from Aluminium

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