

# 1209-7BS-986

## 250W IR Acousto-Optic Deflector



1106

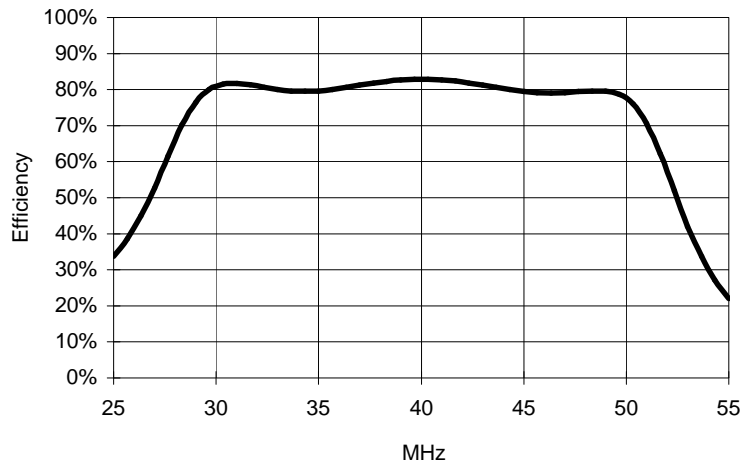
### SPECIFICATIONS

Spectral Range:	2.5 $\mu$ m - 11 $\mu$ m
Operating Wavelength:	10.6 $\mu$ m (others on request)
Interaction Medium:	Single Crystal Germanium
Acoustic Velocity:	5.5mm/ $\mu$ s
Centre Frequency (fc):	40MHz
RF Bandwidth ( $\Delta$ f):	20MHz
Input Impedance:	50 $\Omega$
Input VSWR:	< 1.5:1 at 40MHz
Optical Insertion Loss:	< 7%
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Linear Horizontal, Parallel to Base
Active Aperture:	7 mmH x 14 mmL, standard 5 mmH x 14 mmL, optional
Water Cooling (minimum):	1L/minute at 20°C
Outline Dimensions:	(See reverse)

### TYPICAL PERFORMANCE

Input beam Size:	7mm circular	14mmL x 5mmH
Resolution (Maximum):	25	50
Frequency access time:	1.3 $\mu$ s	2.54 $\mu$ s
Diffraction Efficiency:	> 75% across scan minimum > 80% across scan typical	
Optical Power (Maximum):	250 Watts	
RF Power per channel:	40 Watts (Nominal)	
Bragg Angle:	38.5mrad	
Separation Angle at fc:	77.1mrad	
Scan Angle $\Delta$ f=20MHz:	38.5mrad	

Typical Response 1209-7BS , 10.6 $\mu$ m



**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**

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

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**Quality Assured.**

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



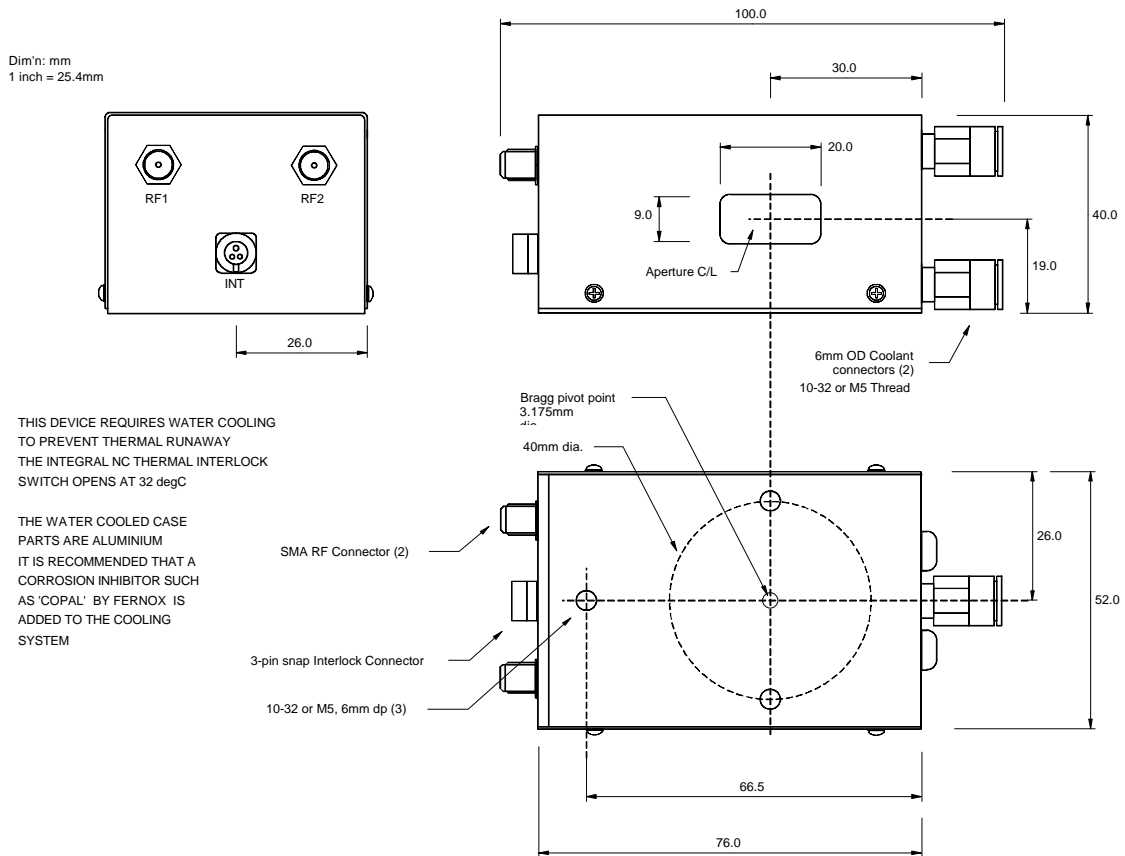
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### OUTLINE DRAWING



### DRIVERS

Deflector Driver/Amplifier

RFA331/2

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