SPECIFICATIONS

Spectral Range: 2.5μm - 11μm
Operating Wavelength: 9.3 or 10.6μm (others on request)
Interaction Medium: Single Crystal Germanium
Acoustic Velocity: 5.5mm/μs
Centre Frequency (fc): 40MHz
RF Bandwidth (Δf): 20MHz
Input Impedance: 50Ω
Input VSWR: < 1.7:1 at 40MHz
Optical Insertion Loss: < 7%
Reflectivity: < 0.5%/Surface
Laser Polarization: Linear Horizontal, Parallel to Base
Optical Power (Maximum): 250 Watts
Active Aperture: 7 mmH x 14 mmL
Water Cooling (minimum): 1L/minute at < 20ºC
Outline Dimensions: (See reverse)

TYPICAL PERFORMANCE

Input beam diameter: 3mm 7mm
Optical access time: 0.35us 0.83us
Diffraction Efficiency: > 85% > 85%
Optical Power * 100 Watts 250 Watts

Bragg Angle: 9.3μm 10.6μm
Separation Angle: 33.9 mrad 38.6 mrad
RF Power (typ): 55 W 75 W

* For higher powers please contact Isomet
OUTLINE DRAWING
Dimensions: mm

All case parts in contact with coolant are fabricated in Brass

NOTES:
1. THIS DEVICE REQUIRES WATER COOLING TO PREVENT THERMAL RUNAWAY. THE INTEGRAL NC THERMAL INTERLOCK SWITCH OPENS AT 35 DEGREES CENTIGRADE.

2. THE WATER COOLED CASE PARTS ARE BRASS, IT IS RECOMMENDED THAT A CORROSION INHIBITOR BE ADDED TO THE COOLING SYSTEM.

Refer application note AN0901 regarding Coolant Specification

DRIVERS

Modulator Driver/Amplifier RFA241-BR
Deflector Driver/Amplifier RFA321-BR