The OAM1020 is a high efficiency laser beam modulator, offering wide beam separation and >200KHz modulation bandwidth. Specific input beam polarization and orientation are required for correct operation.

**SPECIFICATIONS**

- Operating Wavelength: 532nm
- Interaction Material: TeO₂ (Off-Axis Mode)
- Acoustic Velocity: 650 m/s (Nominal)
- Active Aperture: 3mm
- Centre Frequency (f₀): 110MHz
- RF Bandwidth (Δf): 50MHz
- Input Impedance: 50Ω (Nominal)
- VSWR: < 1.5 :1 at f₀
- Laser Polarization: Linear, Horizontal
- Optical Power: < 5W

**PERFORMANCE**

- Wavelength (nm): 532
- RF Drive Power (Watts): <0.8
- Bragg Angle (mrad @ 110MHz): 5.9° (Nominal)
- Beam Separation (mrad) @ 110 MHz: 5.0°
- Diffraction Efficiency: >85% min, >90% typ
- Static Insertion loss: <3% max, < 2% typ

**RECOMMENDED DRIVER**

- Model 523C-L (Digital Modulation)
- Model 533C-L (Analog Modulation)
OAM1020
Acousto-Optic Modulator
Off-Axis

OUTLINE DRAWING

Active aperture C/L
6.98

17.77

50.76

11.42

26.65

11.17

RF Input (SMA)

4-40 UNC x 4mm dp
(2 places)

Bragg pivot Hole
2.38mm x 4mm dp

Dimn: mm
(1" = 25.4mm)

ORIENTATION

Laser input

RF Input

0th

1st

Quality Assured.
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
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