

# SPECIFICATIONS

|                          |                        |                    |
|--------------------------|------------------------|--------------------|
| AO Medium                | TeO2                   |                    |
| Acoustic Velocity        | 4.2 mm/μs              |                    |
| Active Aperture*         | 2.5 mm 'L' X           | 0.6 mm 'H'         |
| Center Frequency (Fc)    | 110 MHz                |                    |
| RF Bandwidth             | 24 MHz @               | -10 dB Return Loss |
| Input Impedance          | 50 Ohms Nominal        |                    |
| VSWR @ Fc                | 1.3:1 Max              |                    |
| Wavelength               | 442-488 nm             |                    |
| Insertion Loss           | 3 % Max                |                    |
| Reflectivity per Surface | 1 % Max                |                    |
| Anti-Reflection Coating  | MIL-C-48497            |                    |
| Optical Power Density    | 250 W/mm <sup>2</sup>  |                    |
| Contrast Ratio           | 1000:1 Min             |                    |
| Polarization             | 90 ° To Mounting Plane |                    |

# PERFORMANCE VS WAVELENGTH

|                         |      |
|-------------------------|------|
| Wavelength (nm)         | 488  |
| Saturation RF Power (W) | 0.4  |
| Bragg Angle (mr)        | 6.4  |
| Beam Separation (mr)    | 12.8 |

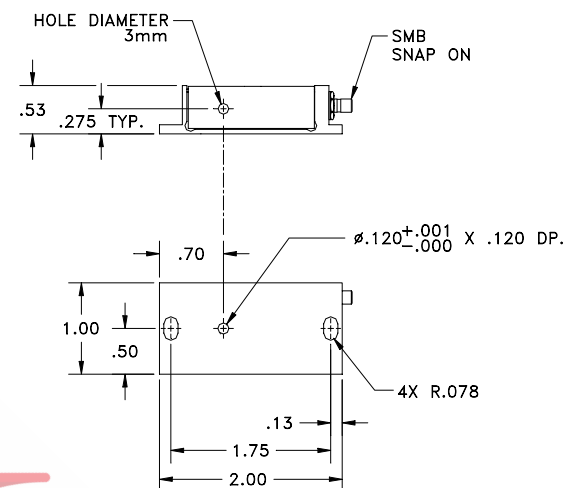
# PERFORMANCE VS BEAM DIAMETER

| Beam Diameter (μm)         | 100 | 150 | 200  |
|----------------------------|-----|-----|------|
| at Wavelength (nm)         | 488 | 488 | 488  |
| Diffraction Efficiency (%) | 70  | 75  | 80   |
| Rise Time (nsec)           | 18  | 25  | 33   |
| Modulation Bandwidth       | 28  | 24  | 15.8 |
|                            | 20  | 9   | 5    |

**For Reference  
Only**

# Outline Drawing:

# Package AOMO 3110-121



# Notes:

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|                                         |     |                       |                                      |           |              |
|-----------------------------------------|-----|-----------------------|--------------------------------------|-----------|--------------|
| TOLERANCES:<br>.XX ± .01<br>.XXX ± .005 | DR  | A. Campi<br>6/17/2002 | Crystal Technology, Inc.             |           |              |
| MATERIAL:                               | CHK |                       | DESCRIPTION:<br><b>AOMO 3110-121</b> |           |              |
|                                         | APP |                       | 110 MHz SMB-2 High Damage A.R.       |           |              |
| FINISH:                                 | APP |                       | PART NUMBER:<br>97-01638-01          | REV:<br>E | SHEET 1 OF 1 |

\*Active Aperture: Aperture over which performance specifications apply.