

## SPECIFICATIONS

|                          |                             |
|--------------------------|-----------------------------|
| AO Medium                | TeO <sub>2</sub>            |
| Acoustic Velocity        | 4.2 mm/μs                   |
| Active Aperture*         | 2.5 mm 'L' X 0.32 mm 'H'    |
| Center Frequency (Fc)    | 200 MHz                     |
| RF Bandwidth             | 50 MHz @ -10 dB Return Loss |
| Input Impedance          | 50 Ohms Nominal             |
| VSWR @ Fc                | 1.3 :1 Max                  |
| Wavelength               | 780-950 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

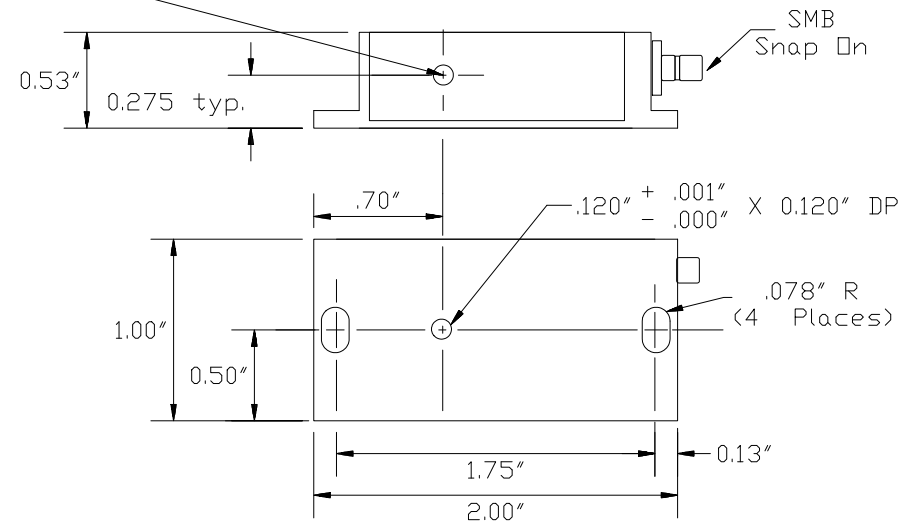
|                           |            |
|---------------------------|------------|
| <b>Wavelength (nm)</b>    | <b>830</b> |
| Maximum Operational Power | 2.0        |
| Bragg Angle (mr)          | 19.8       |
| Beam Separation (mr)      | 39.6       |

## PERFORMANCE VS BEAM DIAMETER

|                            |            |
|----------------------------|------------|
| <b>Beam Diameter (μm)</b>  | <b>150</b> |
| at Wavelength (nm)         | 830        |
| Diffraction Efficiency (%) | 70*        |
| Rise Time (nsec)           | 29         |
| Modulation Bandwidth       | 21.0       |
| Beam Ellipticity           | 10         |

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

## Outline Drawing:



## Document

**10/31/13**

## Control

### Notes:

\*Diffraction Efficiency at 1 Watt RF Power.  
AR coating performance at 830nm .5%/surface  
Burnin Duration 24 Hours @ 1.5 Watts

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|                                         |     |                          |                                                                                                                        |      |        |
|-----------------------------------------|-----|--------------------------|------------------------------------------------------------------------------------------------------------------------|------|--------|
| TOLERANCES:<br>.XX ± .01<br>.XXX ± .005 | DR  | Geri Scholz<br>10/8/2013 | <br><b>AOMO 3200-124</b><br>830nm |      |        |
| MATERIAL:                               | CHK |                          |                                                                                                                        |      |        |
| FINISH:                                 | APP |                          | PART NUMBER:                                                                                                           | REV: | SHEET  |
|                                         | APP |                          | 97-01544-01                                                                                                            | J    | 1 OF 1 |