

## SPECIFICATIONS

|                          |                        |                    |
|--------------------------|------------------------|--------------------|
| AO Medium                | TeO <sub>2</sub>       |                    |
| Acoustic Velocity        | 4.2 mm/μs              |                    |
| Active Aperture*         | 1 mm 'L' X             | 0.1 mm 'H'         |
| Center Frequency (Fc)    | 200 MHz                |                    |
| RF Bandwidth             | 90 MHz @               | -10 dB Return Loss |
| Input Impedance          | 50 Ohms Nominal        |                    |
| VSWR @ Fc                | 1.3 :1 Max             |                    |
| Wavelength               | 1550 nm                |                    |
| Insertion Loss           | 4 % Max                |                    |
| Reflectivity per Surface | 0.5 % Max              |                    |
| Anti-Reflection Coating  | MIL-C-48497            |                    |
| Optical Power Density    | 50 W/mm <sup>2</sup>   |                    |
| Contrast Ratio           | 1000 :1 Min            |                    |
| Polarization             | 90 ° To Mounting Plane |                    |

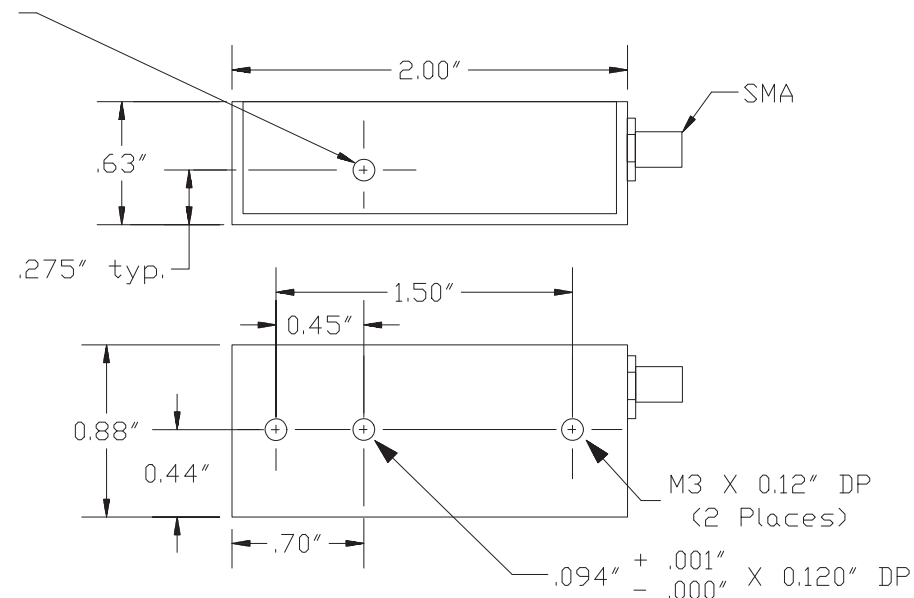
## PERFORMANCE VS WAVELENGTH

|                        |             |
|------------------------|-------------|
| <b>Wavelength (nm)</b> | <b>1550</b> |
| Peak RF Power (W)      | 3           |
| Bragg Angle (mr)       | 36.9        |
| Beam Separation (mr)   | 73.8        |

## PERFORMANCE VS BEAM DIAMETER

|                            |           |           |
|----------------------------|-----------|-----------|
| <b>Beam Diameter (μm)</b>  | <b>50</b> | <b>65</b> |
| at Wavelength (nm)         | 1550      | 1550      |
| Diffraction Efficiency (%) | 50        | 55        |
| Rise Time (nsec)           | 10        | 12        |
| Modulation Bandwidth       | N/A       | N/A       |

## Outline Drawing:



## Document

06/12/15

## Control

### Notes:

Maximum average RF power must not exceed 1W.

THIS DOCUMENT IS THE PROPERTY OF GOOCH AND HOUSEGO. IT IS NOT TO BE REPRODUCED OR DISCLOSED IN WHOLE OR IN PART OTHER THAN BY EMPLOYEES OF GOOCH AND HOUSEGO AND ITS CONTRACTED REPRESENTATIVES AND DISTRIBUTORS. ANY EXCEPTION REQUIRES THE WRITTEN CONSENT OF AN AUTHORIZED REPRESENTATIVE OF GOOCH AND HOUSEGO.

|                                         |     |                          |                                        |        |
|-----------------------------------------|-----|--------------------------|----------------------------------------|--------|
| TOLERANCES:<br>.XX ± .01<br>.XXX ± .005 | DR  | Geri Scholz<br>6/10/2015 |                                        |        |
| MATERIAL:                               | CHK |                          |                                        |        |
| FINISH:                                 | APP |                          | <b>AOMO 3200-1913</b><br>TEO2: 1.55 μm |        |
|                                         | APP |                          |                                        |        |
|                                         |     | PART NUMBER:             | 97-03251-01                            | REV: 2 |
|                                         |     | SHEET 1 OF 1             |                                        |        |

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