

## SPECIFICATIONS

|                                            |                   |
|--------------------------------------------|-------------------|
| AO Medium                                  | TeO <sub>2</sub>  |
| Acoustic Velocity                          | .68 mm/μs         |
| Active Aperture*                           | 2.5 mm Dia        |
| RF Frequency Range                         | 48-86 MHz         |
| RF Bandpass (FWHM)                         | 280 KHz @ 1060 nm |
| Wavelength Range                           | 640-1100 nm       |
| VSWR                                       | 2.4 :1 Max        |
| Input Impedance                            | 50 Ohms Nominal   |
| Insertion Loss                             | 3 % Max           |
| Temperature Sensitivity                    | 0.05 nm/C         |
| Diffacted Beam Collinearity, min deviation | 0.01 degrees      |
| Input Optical Polarization                 | Vertical          |
| Output Optical Polarization                | Horizontal        |
| Max RF Power                               | 2 Watt            |

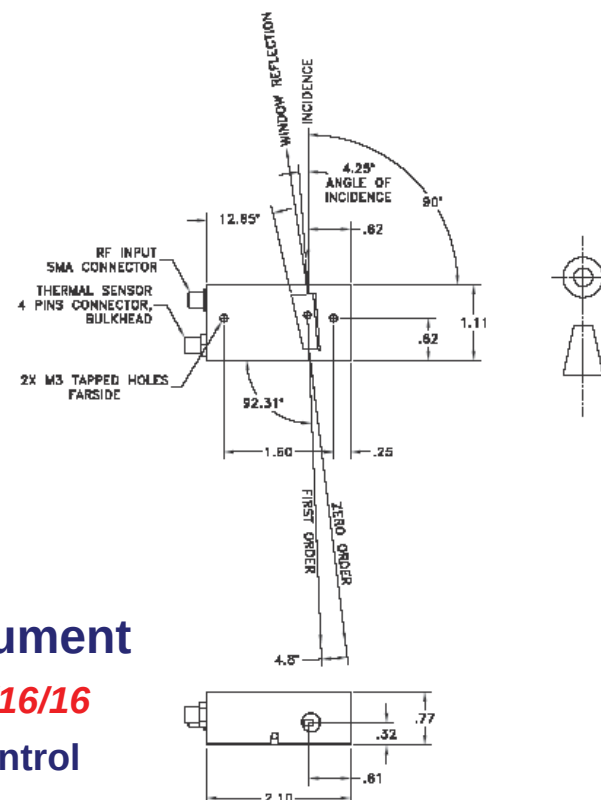
### Special Testing

Diffraction Efficiency  
(per wavelength input divergence < 2 mrad)

| Min | Units | Max |
|-----|-------|-----|
| 90  | %     |     |

### Outline Drawing:

Package 97-02986-01rC



## Document

08/16/16

## Control

### Notes:

Simultaneous Diffraction, multi frequency capable.  
Random Wavelength Access Time: < 1.5 usec (1 mm Beam Diameter)  
Max RF Power with 8 Simultaneous Frequencies = 2W  
First and Zero Order angles shown in the outline drawing, calculated for 830nm wavelength.

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|                                         |     |                         |                                                |              |
|-----------------------------------------|-----|-------------------------|------------------------------------------------|--------------|
| TOLERANCES:<br>.XX ± .01<br>.XXX ± .005 | DR  | Gerl Scholz<br>8/1/2016 |                                                |              |
| MATERIAL:                               | CHK |                         |                                                |              |
|                                         | APP |                         | <b>AOTF PCAOM N.I.R</b><br>48-86MHz Vert. Pol. |              |
|                                         | APP |                         |                                                |              |
| FINISH:                                 |     |                         | PART NUMBER:<br>97-02986-01                    | REV:<br>E    |
|                                         |     |                         |                                                | SHEET 1 OF 1 |

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