

SPECIFICATIONS

AO Medium	TeO ₂		
Acoustic Velocity	4.2 mm/μs		
Active Aperture*	2.5 mm 'L' X	0.6 mm 'H'	
Center Frequency (Fc)	165 MHz		
RF Bandwidth	50 MHz @	-10 dB Return Loss	
Input Impedance	50 Ohms Nominal		
VSWR @ Fc	1.3 :1 Max		
Wavelength	1300-1550 nm		
Insertion Loss	4 % Max		
Reflectivity per Surface	1 % Max		
Anti-Reflection Coating	MIL-C-48497		
Optical Power Density	250 W/mm ²		
Contrast Ratio	1000 :1 Min		
Polarization	0° or 90 ° To Mounting Plane		

PERFORMANCE VS WAVELENGTH

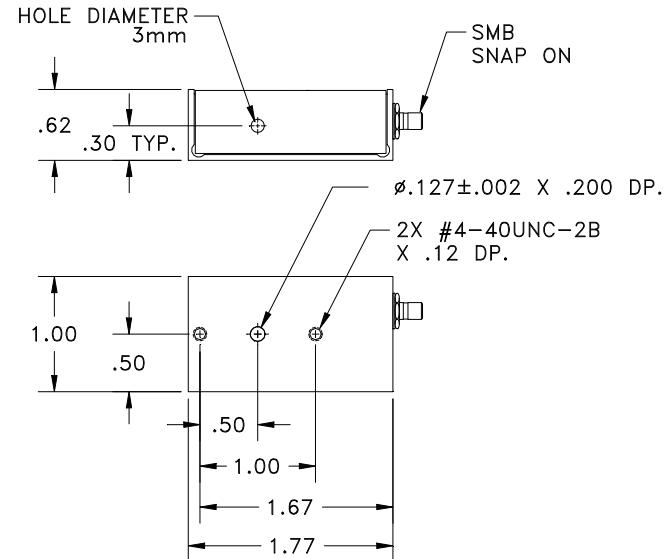
Wavelength (nm)	1064	1300	1550
Saturation RF Power (W)	2.6	3.25	4.5
Bragg Angle (mr)	20.9	25.5	30.5
Beam Separation (mr)	41.8	51	61

PERFORMANCE VS BEAM DIAMETER

Beam Diameter (μm)	400	380	380
at Wavelength (nm)	1064	1300	1550
Diffraction Efficiency (%)	70	60	50
Rise Time (nsec)	78	78	81
Modulation Bandwidth	7	7	7
	NA	NA	NA

*Active Aperture: Aperture over which performance specifications apply.

Outline Drawing:



Document
10/31/13
Control

Notes:

Diffraction Efficiency refers to performance at 2 W RF Power.
Diffraction Efficiency at Saturation RF power is 65% min.
Carrier Frequency @ 1300 nm: 178 MHz; @ 1550 nm: 150 MHz.

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TOLERANCES: .XX ± .01 .XXX ± .005	DR	A. Campi 10/4/2013	 AOMO 3165-1 1.3-1.55 μM, AEF		
MATERIAL:	CHK				
FINISH:	APP				
	APP		PART NUMBER: 97-01287-02	REV: D	SHEET 1 OF 1