M1205-P80L-0.6,-1,-2 (1550nm)
Acousto-Optic Modulator

APPLICATIONS

- Modulator
- Low Resolution Deflector
- Frequency Shifter

RF DRIVERS

- Digital modulation 522C-2
- Analog modulation 532C-2
- Dual modulation 552F-2
- Tuneable with modulation 630C-80 / iSPA-SF1-w

OUTLINE DRAWING

- Active aperture C/L
- Aperture
- 4-40 UNC x 4mm dp (2 places)
- RF Input (SMA)
- Bragg pivot Hole
- Optical centre of AO cell
- Coincides to C/L within 0.76mm

Dimen: mm
(1" = 25.4mm)

Option:
- Metric fixing holes, M3-0.5 thread: add suffix -M

Mount device to heat conducting surface

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
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Quality Assured.
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding
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SPECIFICATIONS

A/R Operating Wavelengths: 1550nm
Interaction Medium: Lead Molybdate (PbMo04)
Acoustic Velocity: 3.63mm/µs

Model: M1205-P80L -0.6 -1 -2

Active Aperture: 0.6mm 1.0mm 2.0mm

Centre Frequency (CF): 80MHz
RF Bandwidth (minimum): 30MHz (+/- 15MHz)
Input Impedance: 50Ω Nominal
VSWR: <1.5:1 @ 80MHz
DC Contrast Ratio: >1000:1 min (>2000:1 typical)
Maximum average or CW power: 2W

PERFORMANCE at 1550nm

Bragg angle: 17.1 mrad
Beam Separation: 34.2 mrad
Static Insertion Loss: < 3%

Beam Diameter: 0.5mm 1.0mm
Rise Time: 92ns 178ns
Modulation Bandwidth @ MTF of 0.5: 3.7 MHz 1.9 MHz

Model: M1205-P80L -0.6 -1 -2

Peak RF Drive Power *: 2.6W 5.0W 9.0W

Typical Deflection Efficiency at:
- 25% of peak RF power: >40%
- 50% of peak RF power: >65%
- 75% of peak RF power: >80%
- 100% of peak RF drive: >85%

* Duty cycled operation applies. Maximum average or CW power = 2.0W.