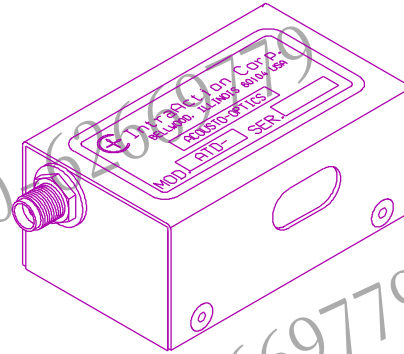


MODEL ATD-80 SERIES SLOW SHEAR MODE DEFLECTOR

- LASER BEAM SCANNING
- OPTICAL SIGNAL PROCESSING
- RANDOM ACCESS DEFLECTION
- LOW DRIVE POWER
- RELIABLE



SPECIFICATIONS

Optical Wavelength Range

488 - 680 nm

Acousto-optic Material

Tellurium Dioxide (TeO₂)

Operating Mode

Slow shear, off axis

Center Frequency

80 MHz

RF Bandwidth

50 MHz

Diffraction Efficiency

80% (minimum at center frequency)

Intensity Variation

<1 dB

Active Aperture¹

5 H x 13 W mm

Input Optical Polarization

Linear, parallel to mount surface

Output Optical Polarization

Linear, perpendicular to mount surface

Static Optical Insertion Loss

5 percent

RF Drive Power²

1 Watt (514 nm)

Input Impedance

50 Ohms (nominal)

VSWR

<2.5:1

RF Connector

SMA

Size (less connector)

2.63 D x 1.00 H x 1.42 W inches

6.68 D x 5.08 H x 3.61 W cm

MODEL

Optical Wavelength

ATD-805AA1

514 nm

Beam Separation (80 MHz)

64.2 mrad

Deflection Angle

40.1 mrad

Acoustic Velocity

640 m / sec

Access Time

1.56 :sec / mm beam width

Time-Bandwidth Product

78 / mm beam width

ATD-805RA1

633 nm

76.3 mrad

47.7 mrad

663 m / sec

1.51 :sec / mm beam width

75 / mm beam width

¹ Other active aperture sizes are available.

² A complete line of frequency synthesized and VCO deflector drivers and RF power amplifiers are available.

Note: The DTD Series of 2-axis deflectors are also available.