

## 780nm Full Band Free Space Acousto-Optic Modulator 150MHz



- **Product Description**

The Idealphotonics' acousto-optic modulator allows users to adjust the output light's amplitude, duration, and frequency/period. The insertion loss can be as low as 2 dB, the extinction ratio can be as high as 50 dB, the rise

time can be as fast as 5 nanoseconds, and the frequency can reach up to several hundred MHz. Applications include switching, pulse picking, fast attenuation, and more. The wavelength range extends from near ultraviolet to near infrared.

- **Product features**

0th-order and 1st-order optical fiber output 、 High extinction ratio 、 Customizable devices according to the customer's wavelength and frequency requirements

- **Part Number**

MP-AOM-780-150M-1mm

- **Application area**

BODTR、 DVS、 Optical switch

- **Core parameters**

| Wavelength | Frequency | Clear Aperture |
|------------|-----------|----------------|
| 780nm      | 150MHz    | 1mm            |

## ● General Parameters

### Main Parameters

| Part Number         | Wave length (nm) | Frequency (MHz) | Clear Aperture (mm) | Diffraction Efficiency (%) | Optical Power Density (W/m <sup>2</sup> ) | Drive Power (W) | Input Resistance (Ω) | VS (W)     |
|---------------------|------------------|-----------------|---------------------|----------------------------|-------------------------------------------|-----------------|----------------------|------------|
| MP-AOM-532-80M-1mm  | 532              | 80              | 1                   | 85                         | 250                                       | 0.8             | 50                   | <1<br>.3:1 |
| MP-AOM-532-80M-2mm  | 532              | 80              | 2                   | 85                         | 250                                       | 1.5             | 50                   | <1<br>.3:1 |
| MP-AOM-532-100M-1mm | 532              | 100             | 1                   | 85                         | 250                                       | 0.8             | 50                   | <1<br>.3:1 |

|            |     |     |     |    |     |     |    |     |
|------------|-----|-----|-----|----|-----|-----|----|-----|
| MP-AOM-532 |     |     |     |    |     |     |    | <1  |
| -200M-0.3m | 532 | 200 | 0.3 | 70 | 250 | 2   | 50 | .5: |
| m          |     |     |     |    |     |     |    | 1   |
| MP-AOM-532 |     |     |     |    |     |     |    | <1  |
| -200M-4mm  | 532 | 200 | 4   | 80 | 250 | 4   | 50 | .5: |
|            |     |     |     |    |     |     |    | 1   |
| MP-AOM-632 |     |     |     |    |     |     |    | <1  |
| -80M-1mm   | 632 | 80  | 1   | 85 | 250 | 0.8 | 50 | .3: |
|            |     |     |     |    |     |     |    | 1   |
| MP-AOM-632 |     |     |     |    |     |     |    | <1  |
| -100M-1mm  | 632 | 100 | 1   | 85 | 250 | 0.8 | 50 | .3: |
|            |     |     |     |    |     |     |    | 1   |
| MP-AOM-632 |     |     |     |    |     |     |    | <1  |
| -200M-0.3m | 632 | 200 | 0.3 | 70 | 250 | 2.5 | 50 | .5: |
| m          |     |     |     |    |     |     |    | 1   |
| MP-AOM-632 |     |     |     |    |     |     |    | <1  |
| -200M-1mm  | 632 | 200 | 1   | 85 | 250 | 1.5 | 50 | .5: |
|            |     |     |     |    |     |     |    | 1   |

|                               |     |     |     |    |     |     |    |                |
|-------------------------------|-----|-----|-----|----|-----|-----|----|----------------|
| MP-AOM-780<br>-110M-1mm       | 780 | 110 | 1   | 85 | 250 | 1.3 | 50 | <1<br>.3:<br>1 |
| MP-AOM-780<br>-150M-1mm       | 780 | 150 | 1   | 75 | 250 | 2   | 50 | <1<br>.3:<br>1 |
| MP-AOM-780<br>-150M-2mm       | 780 | 150 | 2   | 75 | 250 | 2.5 | 50 | <1<br>.5:<br>1 |
| MP-AOM-780<br>-200M-0.3m<br>m | 780 | 200 | 0.3 | 70 | 250 | 3   | 50 | <1<br>.5:<br>1 |
| MP-AOM-780<br>-200M-2mm       | 780 | 200 | 2   | 70 | 250 | 3.5 | 50 | <1<br>.5:<br>1 |
| MP-AOM-850<br>-110M-0.7m<br>m | 850 | 110 | 0.7 | 80 | 250 | 1   | 50 | 1.<br>2:<br>1  |

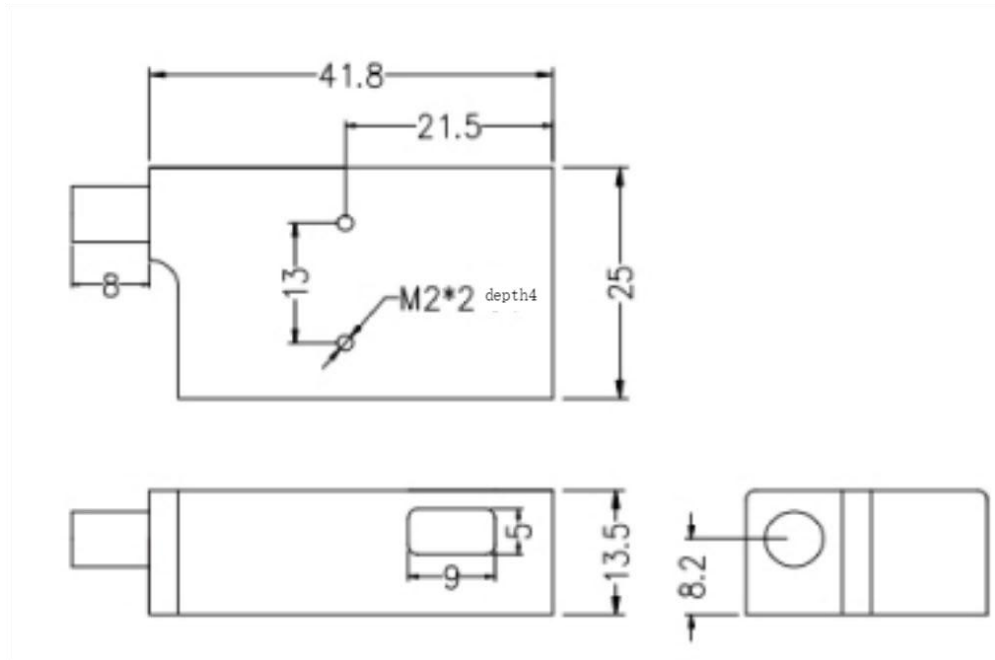
|             |      |     |     |    |     |     |    |     |
|-------------|------|-----|-----|----|-----|-----|----|-----|
| MP-AOM-850  |      |     |     |    |     |     |    | <1  |
| -200M-0.3m  | 850  | 200 | 0.3 | 80 | 250 | 3   | 50 | .5: |
| m           |      |     |     |    |     |     |    | 1   |
| MP-AOM-106  |      |     |     |    |     |     |    | 1.  |
| 4-100M-0.7m | 1064 | 100 | 0.7 | 85 | 250 | 1.8 | 50 | 2:  |
| m           |      |     |     |    |     |     |    | 1   |
| MP-AOM-106  |      |     |     |    |     |     |    | <1  |
| 4-120M-0.7m | 1064 | 120 | 0.7 | 85 | 250 | 1.8 | 50 | .3: |
| m           |      |     |     |    |     |     |    | 1   |
| MP-AOM-106  |      |     |     |    |     |     |    | <1  |
| 4-150M-0.5m | 1064 | 150 | 0.5 | 85 | 250 | 2.5 | 50 | .3: |
| m           |      |     |     |    |     |     |    | 1   |
| MP-AOM-106  |      |     |     |    |     |     |    | <1  |
| 4-200M-0.3m | 1064 | 200 | 0.3 | 70 | 250 | 2.5 | 50 | .3: |
| m           |      |     |     |    |     |     |    | 1   |
| MP-AOM-155  |      |     |     |    |     |     |    | <1  |
| 0-40M-0.7m  | 1550 | 40  | 0.7 | 80 | 250 | 2.5 | 50 | .3: |
| m           |      |     |     |    |     |     |    | 1   |

|             |      |     |     |    |     |     |    |     |
|-------------|------|-----|-----|----|-----|-----|----|-----|
| MP-AOM-155  |      |     |     |    |     |     |    | <1  |
| 0-60M-0.5m  | 1550 | 60  | 0.5 | 80 | 250 | 2.5 | 50 | .3: |
| m           |      |     |     |    |     |     |    | 1   |
| MP-AOM-155  |      |     |     |    |     |     |    | <1  |
| 0-80M-0.7m  | 1550 | 80  | 0.7 | 80 | 250 | 2.5 | 50 | .3: |
| m           |      |     |     |    |     |     |    | 1   |
| MP-AOM-155  |      |     |     |    |     |     |    | <1  |
| 0-150M-0.5m | 1550 | 150 | 0.5 | 65 | 250 | 2.5 | 50 | .5: |
| m           |      |     |     |    |     |     |    | 1   |
| MP-AOM-155  |      |     |     |    |     |     |    | <1  |
| 0-200M-0.3m | 1550 | 200 | 0.3 | 55 | 250 | 3   | 50 | .5: |
| m           |      |     |     |    |     |     |    | 1   |

We can offer customized services to customers: Wavelength range from 500-2000nm with any band selectable. Frequency range from 40-300MHz with any frequency selectable, and frequency accuracy can be customized. Aperture size from 0.1-4mm can be customized. The enclosure size can be tailored to fit the customer's system requirements, including the material of the enclosure. We can optimize the device according to the customer's specific performance requirements

## Dimensions

### AOM Modulator



### RF Driver

