

# 532nm Full Bandwidth Free-Space Acousto-Optic Modulator 80MHz



## ● 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.

## ● Part Number

A-532-80-L-T-D1-T-A-K

## ● Product features

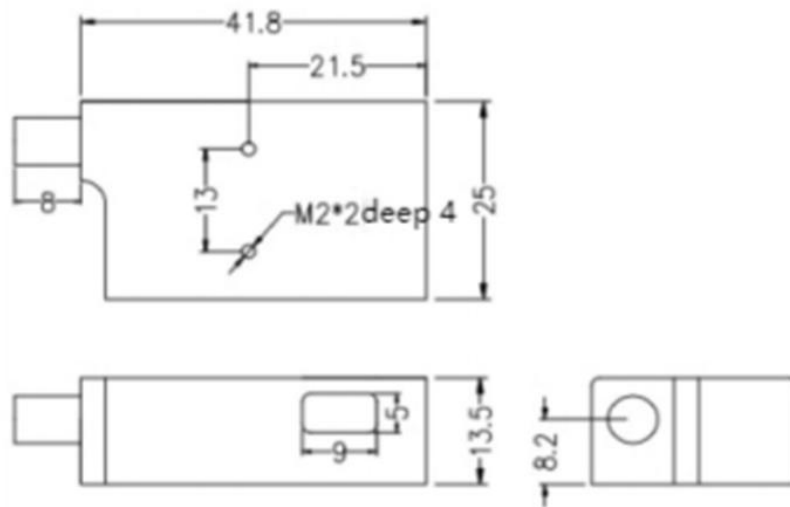
0th-order and 1st-order optical fiber output 、 High extinction ratio 、 Customizable devices according to the customer's wavelength and frequency requirements

## ● Application area

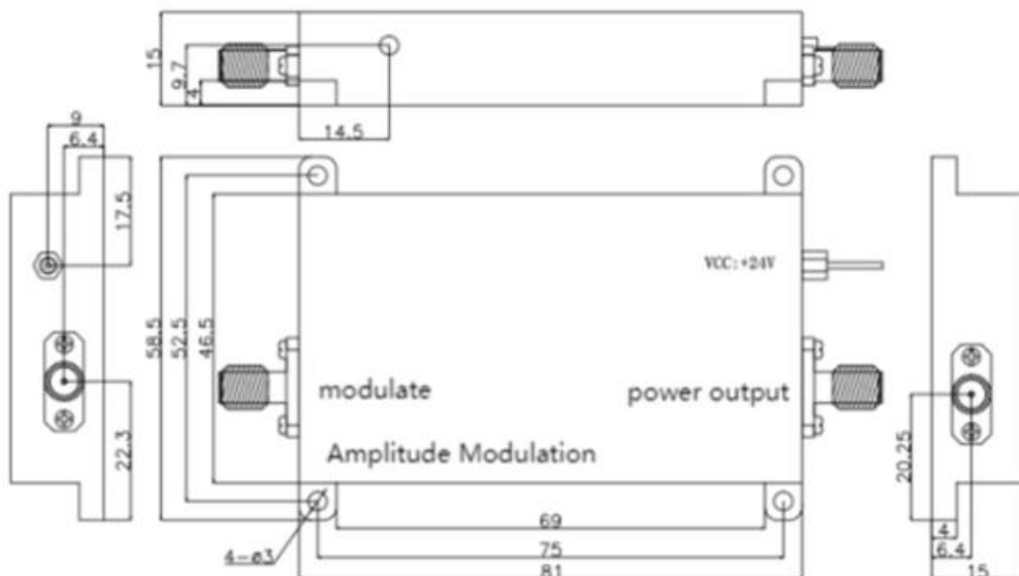
BODTR、 DVS、 Optical Switch

## Dimensional Drawing

AOM Modulator



RF Driver



## Parameters

ParametersMain Parameters

| PN#                      | Wavelength (nm) | Frequency (MHz) | Aperture (mm) | Diffraction Efficiency (%) | Optical Power Density (W/mm <sup>2</sup> ) | Drive Power (W) | Input Impedance (Ω) | Voltage Standing Wave Ratio (VSWR) |
|--------------------------|-----------------|-----------------|---------------|----------------------------|--------------------------------------------|-----------------|---------------------|------------------------------------|
| A-532-80-L-T-D1-T-A-K    | 532             | 80              | 1             | 85                         | 250                                        | 0.8             | 50                  | <1.3:1                             |
| A-532-80-L-T-D2-T-A-K    | 532             | 80              | 2             | 85                         | 250                                        | 1.5             | 50                  | <1.3:1                             |
| A-532-100-L-T-D1-T-A-K   | 532             | 100             | 1             | 85                         | 250                                        | 0.8             | 50                  | <1.3:1                             |
| A-532-200-L-T-D0.3-T-A-K | 532             | 200             | 0.3           | 70                         | 250                                        | 2               | 50                  | <1.5: 1                            |
| A-532-200-L-T-D4-T-A-K   | 532             | 200             | 4             | 80                         | 250                                        | 4               | 50                  | <1.5: 1                            |
| A-632-80-L-T-D1-T-A-K    | 632             | 80              | 1             | 85                         | 250                                        | 0.8             | 50                  | <1.3:1                             |
| A-632-100-L-T-D1-T-A-K   | 632             | 100             | 1             | 85                         | 250                                        | 0.8             | 50                  | <1.3:1                             |
| A-632-200-L-T-D0.3-T-A-K | 632             | 200             | 0.3           | 70                         | 250                                        | 2.5             | 50                  | <1.5: 1                            |
| A-632-200-L-T-D1-T-A-K   | 632             | 200             | 1             | 85                         | 250                                        | 1.5             | 50                  | <1.5: 1                            |
| A-780-110-L-T-D1-T-A-K   | 780             | 110             | 1             | 85                         | 250                                        | 1.3             | 50                  | <1.3:1                             |

|                                   |      |     |     |    |     |     |    |         |
|-----------------------------------|------|-----|-----|----|-----|-----|----|---------|
| A-780-15<br>0-L-T-D1-<br>T-A-K    | 780  | 150 | 1   | 75 | 250 | 2   | 50 | <1.3:1  |
| A-780-15<br>0-L-T-D2-<br>T-A-K    | 780  | 150 | 2   | 75 | 250 | 2.5 | 50 | <1.5: 1 |
| A-780-20<br>0-L-T-D0.<br>3-T-A-K  | 780  | 200 | 0.3 | 70 | 250 | 3   | 50 | <1.5: 1 |
| A-780-20<br>0-L-T-D2-<br>T-A-K    | 780  | 200 | 2   | 70 | 250 | 3.5 | 50 | <1.5: 1 |
| A-850-11<br>0-L-T-D0.<br>7-T-A-K  | 850  | 110 | 0.7 | 80 | 250 | 1   | 50 | 1.2: 1  |
| A-850-20<br>0-L-T-D0.<br>3-T-A-K  | 850  | 200 | 0.3 | 80 | 250 | 3   | 50 | <1.5: 1 |
| A-1064-1<br>00-L-T-D<br>0.7-T-A-K | 1064 | 100 | 0.7 | 85 | 250 | 1.8 | 50 | 1.2: 1  |
| A-1064-1<br>20-L-T-D<br>0.7-T-A-K | 1064 | 120 | 0.7 | 85 | 250 | 1.8 | 50 | <1.3:1  |
| A-1064-1<br>50-L-T-D<br>0.5-T-A-K | 1064 | 150 | 0.5 | 85 | 250 | 2.5 | 50 | <1.3:1  |
| A-1064-2<br>00-L-T-D<br>0.3-T-A-K | 1064 | 200 | 0.3 | 70 | 250 | 2.5 | 50 | <1.3:1  |
| A-1550-4<br>0-L-T-D0.<br>7-T-A-K  | 1550 | 40  | 0.7 | 80 | 250 | 2.5 | 50 | <1.3:1  |
| A-1550-6<br>0-L-T-D0.<br>5-T-A-K  | 1550 | 60  | 0.5 | 80 | 250 | 2.5 | 50 | <1.3:1  |
| A-1550-8<br>0-L-T-D0.<br>7-T-A-K  | 1550 | 80  | 0.7 | 80 | 250 | 2.5 | 50 | <1.3:1  |

|           |      |     |     |    |     |     |    |         |
|-----------|------|-----|-----|----|-----|-----|----|---------|
| A-1550-1  |      |     |     |    |     |     |    |         |
| 50-L-T-D  | 1550 | 150 | 0.5 | 65 | 250 | 2.5 | 50 | <1.5: 1 |
| 0.5-T-A-K |      |     |     |    |     |     |    |         |
| A-1550-2  |      |     |     |    |     |     |    |         |
| 00-L-T-D  | 1550 | 200 | 0.3 | 55 | 250 | 3   | 50 | <1.5: 1 |
| 0.3-T-A-K |      |     |     |    |     |     |    |         |

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