

1550nm Fiber Coupled Acousto-Optic Modulator / Frequency Shifter Series Products



◆ Description

The **acousto-optic modulator** is an optoelectronic product that uses the principle of acousto-optic interaction to perform amplitude modulation and frequency shift processing on the laser. The wavelength ranges from 300nm to 2000nm. It adopts a metal shell design, a compact structure and good sealing effect. The innovative packaging technology ensures high Reliability and temperature stability.

Performance Characteristics	<ul style="list-style-type: none"> ■ Fast Response Time ■ Low Insertion Loss ■ High Extinction Ratio ■ High Temperature Reliability ■ Compact Package
Applications	<ul style="list-style-type: none"> ■ Hydrophone System ■ Fiber Sensor ■ Fiber Ranging System ■ Lidar nonlinear correction system ■ Fiber Sensor
Technical Index	Below are 1550nm device performance indicators (Frequencies and Wavelengths can be Customized According to Requirements)

◆ Ordering Information

AOM-①-②-③-④-⑤-⑥-⑦-⑧-⑨

1-SignalWavelength	2-Frequency	3-HandlingPower	4-Package Dimension
1550-1550nm	40-40 Mhz	05-500mW	C1-67*23*15
2000-2000nm	200-200Mhz	10-1W	C2-40*28*12
S-Specify	S-Specify	S-Specify	S-Specify

5-Fiber Type	6-FiberLength	7-Fiber Jacket	8-Jacket Length	9-Connector
PM1550-PM1550	1-1M	0-Bare Fiber	1-1M	FU-FC/PC
SMF28e- SMF28e	1.5-1.5M	1-900um Loose Tube	1.5-1.5M	FA-FC/APC
S-Specify	S-Specify	S-Specify	S-Specify	S-specify

◆ Specification

Parameter	Unit	Value				
Interaction Material		TeO ₂				
Frequency	/	35-80MHZ	100-120MHZ	150MHZ	200MHZ	300MHZ
Signal Wavelength(λ c)	nm	1520~2000				
Max. InsertionLoss	dB	2.0	2.0	3.5	4.5	6.5
Min. Polarization Extinction Ratio	dB	20				
Min. Extinction Ratio(Turn On/Off)	dB	50s			60	
Max. Voltage Standing WaveRatio(VSWR)	/	1.2:1		1.5:1		
Max.Rise-Time/Fall-Time(10%-90%)	ns	< 60		< 20	< 10	< 7
Frequency Shifting	MHZ	35-80	100-120	150	200	300
3dB BandWidth Range	MHZ	-	-	> 30	> 50	> 80
Max. Average OpticalPower	mW	500(Other Power Available On Request)				
Peak Power	kW	1 (Other Peak Power On Request)				
Input Impedance	Ω	50				
Max. RF Power	W	2.5				
FiberType	/	PM1550/SMF28e				
OperatingTemperature	$^{\circ}$ C	-10 to+65				
StorageTemperature	$^{\circ}$ C	-20 to+70				

*Connector key is aligned to slow axis.