

Free-Space Electro-Optical Modulator

(2mm aperture, 300nm to 2000nm)

Features

- High Performance
- Compact Package
- Easy integration
- Customize Available
- Low cost

Product Description

Agiltron's Free-space Electro-optic modulator (FEOM) is a LT based modulator which is efficient, convenient and easy to use tools to modify the phase, frequency, polarization or amplitude of a free-space laser. The modulation spectrum ranges from DC-coupled phase shifters to high-Q, resonant enhanced EOMs in the kHz, MHz and GHz range.



Performance Specifications

Parameters	Min	Typical	Max	Unit
Modulator Crystal	MgO-Doped LiNbO ₃			
Wavelength Range	W1	400	600	nm
	W2	600	900	
	W3	900	1250	
	W4	1250	1650	
Clear Aperture	2			mm
Halfwave Voltage, non-resonant	205V @ 633nm			
Halfwave Voltage, resonant	15V @ 633nm			
Extinction Ratio	10			dB
Input impedance, resonant	50			ohms
Input capacitance, non-resonant	14			pF
Max Optical Power Density	532nm		2	W/mm ²
	1064nm		4	
Dimension	86 x 32 x 32			mm
Temperature	-20		50	°C

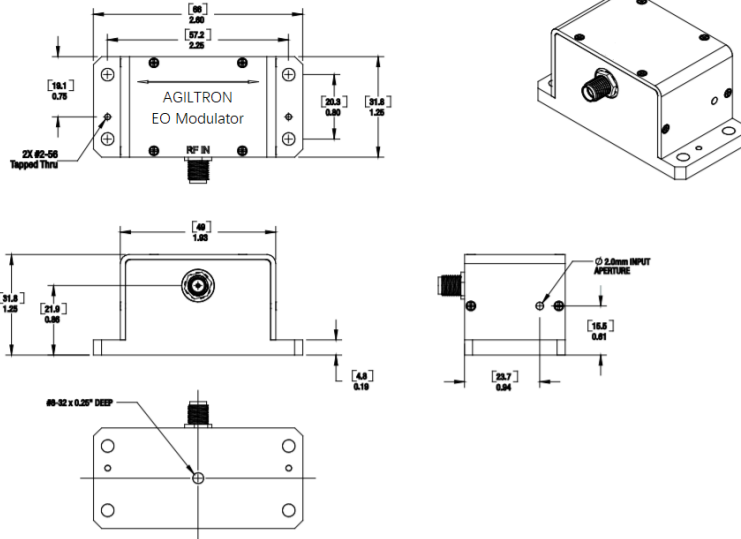
Applications

- Laser Modulation
- Holography
- Metal cutting/engraving
- Microfabrication



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Mechanical Drawing



Ordering Information

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	Type	Wavelength				
FEOM	Amplitude = 1 Phase = 2	0500=400-600 nm 0750=600-900 nm 1050=900-1250 nm 1450=1250-1650 nm				