

Resonant Free-Space Electro-Optical Modulator

(2mm aperture, 400nm to 2000nm, 15V Vp)

Product Description

Our Free-space Electro-optic modulator (FEOM) is a special electro-optical crystal based modulator which efficiently modify the phase, polarization or amplitude of a free-space laser with minimum piezo-effect and charge building-up. This resonant modulator can be continently driven by a standard laboratory function generator at a fixed frequency about 20MHz. Custom versions are also available, with user-specified resonant frequencies from 0.1 to 100 MHz and a variety of AR coatings.



Performance Specifications

Parameters	Min	Typical	Max	Unit
Wavelength Range	W1	400	600	nm
	W2	600	900	
	W3	900	1250	
	W4	1250	1650	
Halfwave Voltage, non-resonant	225V @ 633nm			
Halfwave Voltage, resonant	15V @ 633nm			
Extinction Ratio	10			dB
Input impedance, resonant		50		ohms
Input capacitance, non-resonant		14		pF
Aperture			3	mm
Max Optical Power Density	532nm		2	W/mm ²
	1064nm		4	
Dimension	86 x 32 x 32			mm
Temperature	-20		50	°C

Features

- Low loss
- Ease to use
- Low cost

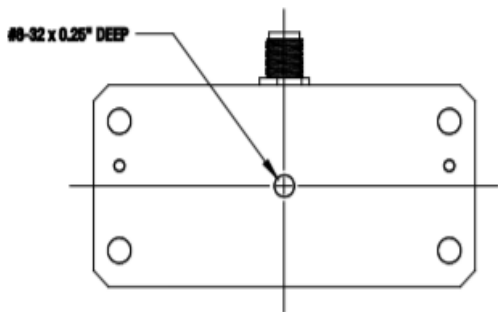
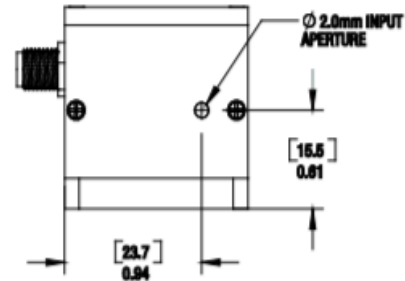
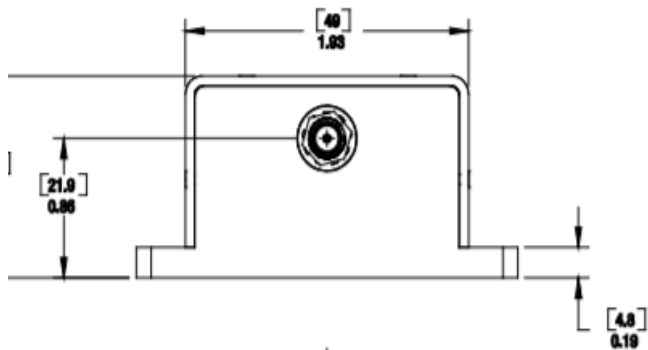
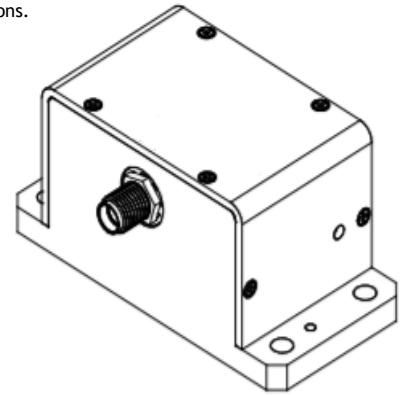
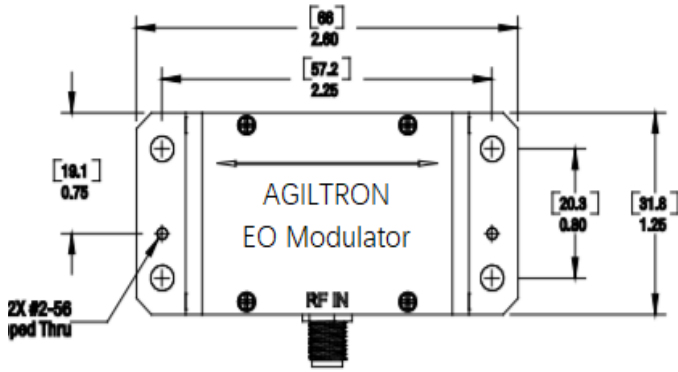
Applications

- Laser Modulation



Mechanical Drawing

*Product dimensions may change without notice. This is sometimes required for non-standard specifications.



Ordering Information

Prefix	Type	Wavelength	Resonance 1	Resonance 2	Resonance 3	Input Polarizer	Output Polarizer	Configure
FEOM-	Amplitude = 1 Phase = 2	250-400nm = 3 400-600nm = 5 600-900nm = 7 900-1250nm = 9 1250-1650nm = B	20MHz = 2 10MHz = 1 30MHz = 3 50MHz = 5 80MHz = 8 100MHz = 9	20MHz = 2 10MHz = 1 30MHz = 3 50MHz = 5 80MHz = 8 100MHz = 9	20MHz = 2 10MHz = 1 30MHz = 3 50MHz = 5 80MHz = 8 100MHz = 9	No = 1 Yes = 2	No = 1 Yes = 2	1 1