

Product Overview

This modulator has been specially designed for high power and fast rise time application. They can be used as intensity/amplitude modulation as well as frequency shifters at 180MHz.

Features

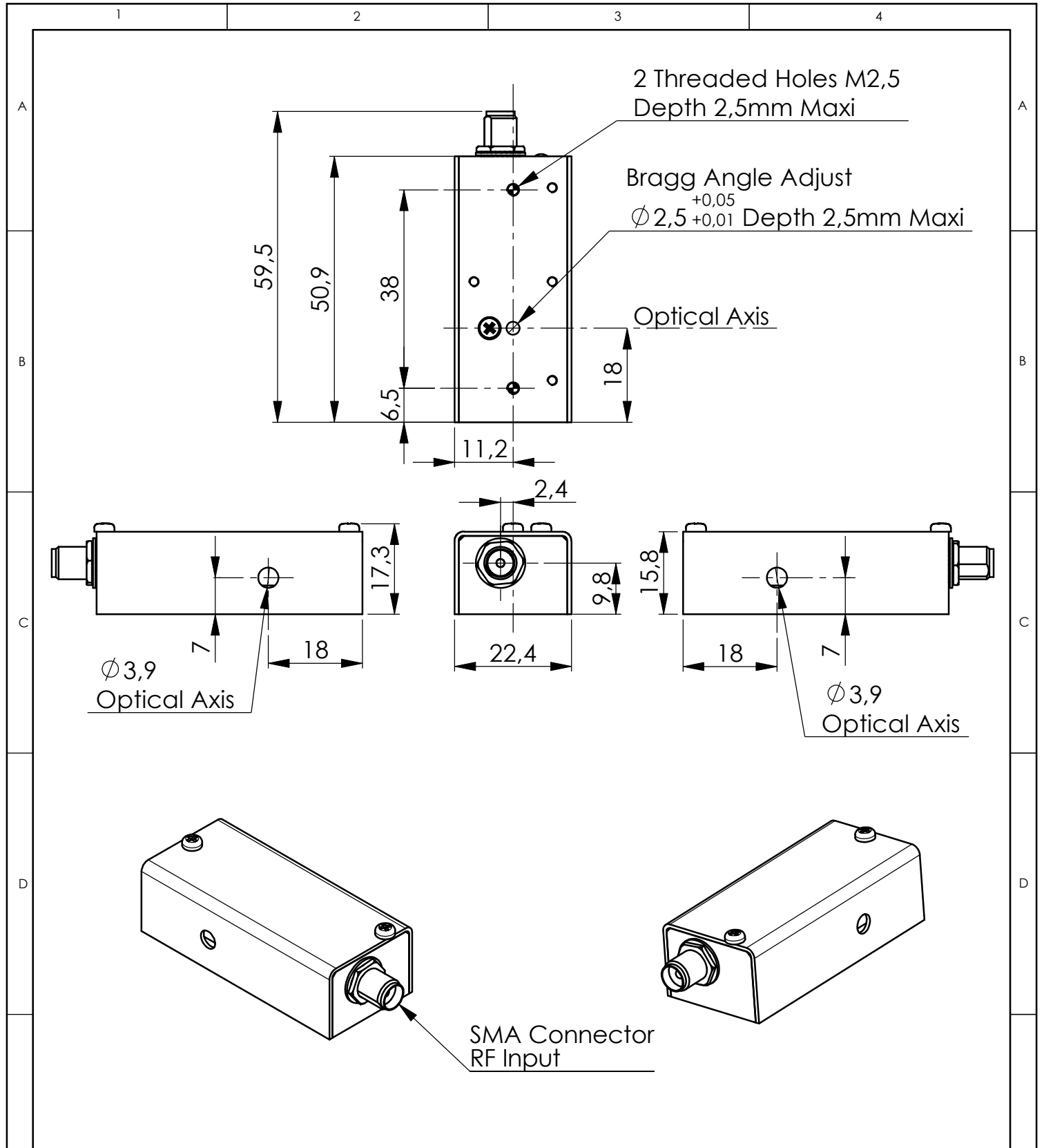
- Small rise time
- High optical power
- Linear polarization


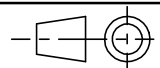


	Units	Min	Nom	Max
Material-Acoustic mode-Velocity		Fused Silica [L] – 5960 m/s		
Optical Wavelength range (AR coated) (λ)	nm	325	-	442
Carrier Frequency / Frequency shift	MHz	+/-180		
Transmission	%	95	98	
Input / Output Polarization with ref to baseplate		Linear vertical		
Active Aperture	mm ²	0.2 x 1		
Beam diameter (1/e ²)(ϕ)	μ m	90		160
Rise/fall time (T_r)	ns	9.9		17.6
Analog Amplitude Modulation Bandwidth (-3dB) (F_{-3dB})	MHz			48
Separation Angle (0-1)	mrd	8		9
Static Extinction Ratio	dB	30		
*Diffraction Efficiency (η)	%		85	
Optical power density	W/mm ²	10		
Input impedance	Ω		50	
V.S.W.R.			< 1.2:1	
RF Power (P)	W			2
Connector		SMA female		
Size	mm ³	59.5 x 22.4 x 17.3		
Weight	g		50	
Packaging		IN PRO 154		
Operating Temperature (non condensing)	°C	+10	+25	+40
Storage Temperature (non condensing)	°C	-40		+65
RoHS Compliance		Yes		

* Diffraction efficiency is beam diameter and wavelength dependent.

$$T_r = 0.66 \frac{\phi}{V} * F_{-3dB} = \frac{0.48}{T_r} * \Delta\theta = \frac{\lambda F}{V} * \frac{P_1}{P_2} = \frac{\lambda_1}{\lambda_2}$$



A	01/02/07	E.D	Plan initial / Initial Drawing	
Indice Index	Date	Auteur Author	Modifications	
Conception Design	E.D	PLAN D'INTERFACE / OUTLINE DRAWING		 OPTO-ELECTRONIC A.A. SA OPTO-ELECTRONIQUE DIVISION 18, rue Nicolas Appert F-91898 ORSAY tel : 08 11 09 76 76 fax : 01 76 91 50 31
Vérification Checking	L.F			
Tolérance Tolerance	ISO 2768mK	Référence / Reference		
Echelle Scale	1:1	IN-PRO-154		
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