MCQ40-A1.5-L1064-Z32-Cxxx

AO MODULATOR/SHIFTER

Product Overview

These modulators are made of Quartz and due to their hard V-coating with low reflectivity, they have got a high damage threshold. In addition, due to the small aperture, fast rise time can be achieved.
They are mainly intended for intensity modulation in high power applications but can be used as frequency shifter as well: +/- 40 MHz.

Features

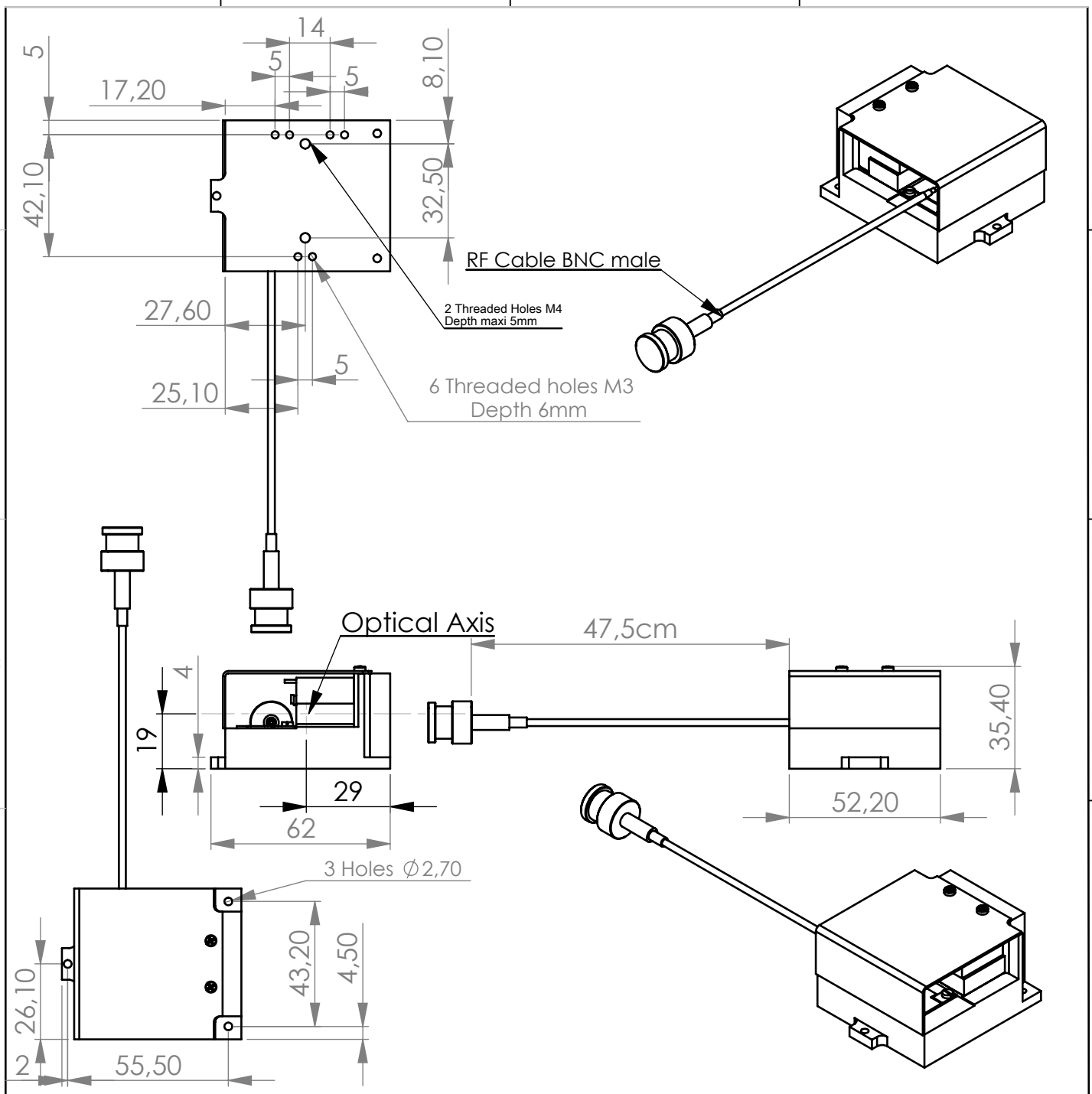
- 1.06 µm design.
- Linear polarisation.
- Air cooled.
- High damaged threshold.

	Units	Min	Nom	Max
Material-Acoustic mode-Velocity		*Crystal quartz [L] – 5740 m/s*		
Optical Wavelength range (AR coated) (λ)	nm	*1030*	*1064*	*1080*
Carrier Frequency / Frequency shift	MHz	*+/-40*		
Transmission	%	*99*		
Input / Output Polarization with ref to baseplate		*Linear vertical*		
Active Aperture	mm^2	*1.5 x 1.5*		
Beam diameter ($1/e^2$)(ϕ)	mm	*0.7*		*1.2*
Rise/fall time (T_r)	ns	*81*		*138*
Analog Amplitude Modulation Bandwidth (-3dB) (F_{-3dB})	MHz			*6*
Separation Angle (0-1)	mrd	*7.2*	*7.4*	*7.5*
Static Extinction Ratio	dB	*30*		
* Diffraction Efficiency (η)	%	*80*	*85*	
Optical power density	MW/cm^2	*500*		
Input impedance	Ω		*50*	
V.S.W.R.			*< 1.2:1*	
RF Power (P)	W		*15*	
Connector		*SMA female*		
Size	mm^3	*33 x 36.5 x 25.8*		
Weight	g		*30*	
Packaging		*IN PRO 223*		
Operating Temperature (non condensing)	℃	*+10*	*+25*	*+40*
Storage Temperature (non condensing)	℃	*-40*		*+65*
RoHS Compliance		*Yes*		

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

AA OPTO-ELECTRONIC
18, rue Nicolas Appert
91898 ORSAY FRANCE

Tel: +33 (0)1 76 91 50 12
Fax: +33 (0)1 76 91 50 31
www.aaoptoelectronic.com



Indice Index	Date	Auteur Author	Modifications
E	28/03/11	G.M	Evolution me-pcb-145.
D	05/10/09	E.V	Modification mise en page
C	30/09/09	E.V	Suppression cable température / Abolition temperature cable
B	10/03/09	E.V	Ajout de 2 trous taraudés M3 / Additional 2 threaded holes M3
A	07/11/08	E.V	Plan initial / Initial Drawing

Conception Design: E.V

Vérification Checking:

Tolérance Tolerance: ISO 2768mK

Echelle Scale: 1:2

Format A4

PLAN D'INTERFACE / OUTLINE DRAWING

Référence / Reference

IN-PRO-223

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

Folio / Sheet: 1/1

Indice / Index: E