

Product Overview

These modulators have been specially designed for applications where TeO2 cannot be used. Made of fused Silica, they offer a better resistance to optical power and a small rise time. Despite the low duty cycle, they will be suitable for fast pulse picking applications.

Features

- Small rise time
- High optical power
- Linear polarization
- High diffraction efficiency with low duty cycle

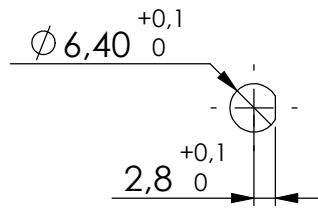


	Units	Min	Nom	Max
Material-Acoustic mode-Velocity		Fused Silica [L] – 5960 m/s		
Optical Wavelength range (AR coated) (λ)	nm	1030		1064
Carrier Frequency / Frequency shift	MHz	+/-80		
Transmission	%	99		
Input / Output Polarization with ref to baseplate		Linear vertical		
Separation Angle (0-1)	mrd	13.8		14.3
Static Extinction Ratio	dB	30		
Optical power density	W/mm ²			100
Input impedance	Ω		50	
V.S.W.R.			< 1.2:1	
RF Power (P) (Duty cycle < 10%)	W			15
Connector		SMA female		
Size	mm ³	23.5 x 15 x 9		
Weight	g		50	
Packaging		IN PRO 083		
Operating Temperature (non condensing)	°C	+10	+25	+40
Storage Temperature (non condensing)	°C	-40		+65
RoHS Compliance		Yes		

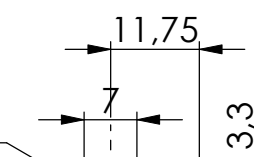
Models		MQ80-A0.3-L1030.1064	MQ80-A0.7-L1030.1064
Active Aperture	mm ²	0.3 x 0.3	0.7 x 0.7
Diffraction efficiency (Duty cycle < 10%)	%	>80% with beam dia≥0.2mm >70% with beam dia≥0.15mm	>85% with beam dia≥0.4mm >80% with beam dia≥0.3mm
Analog Amplitude Modulation Bandwidth (-3dB) (F _{-3dB})	MHz	Max 40	Max 14

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

RF Input
SMA Bulkhead Jack
Rear mount
Flexible Cable
Thickness panel 3,2 max



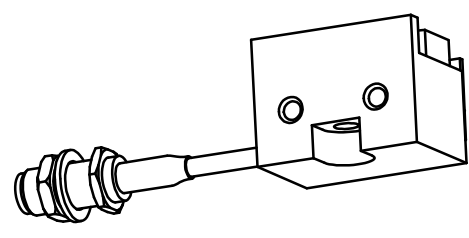
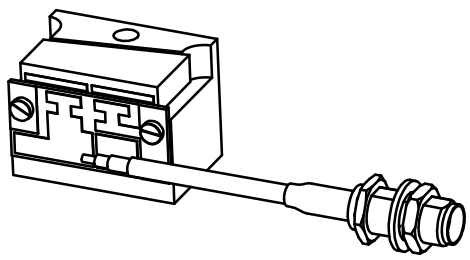
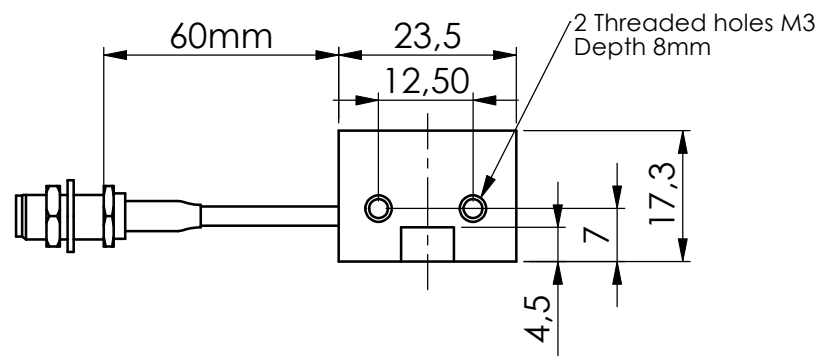
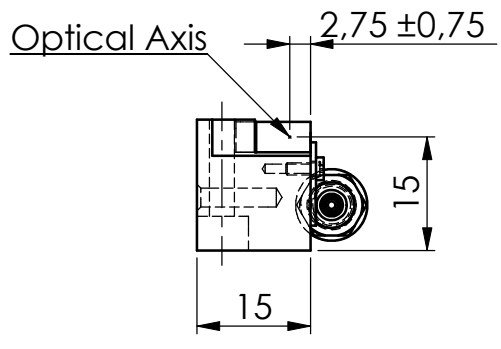
Hole $\phi 3,3$ Through


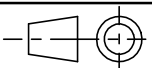


3,3

9 $\pm 0,75$

Optical Axis



C	02/06/08	D.D	Add of 2 holes M3 / Ajout de 2 trous M3
B	14/04/08	E.D	Add of counterbore / Ajout d'un lamage
A	16/04/07	E.D	Plan initial / Initial Drawing
Index	Date	Auteur Author	Modifications
Conception Design	E.D	PLAN D'INTERFACE / OUTLINE DRAWING IN-PRO-083	
Vérification Checking	L.F		
Tolérance Tolerance	ISO 2768mK	Référence / Reference	
Echelle Scale	1:1	 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	
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