

DESCRIPTION

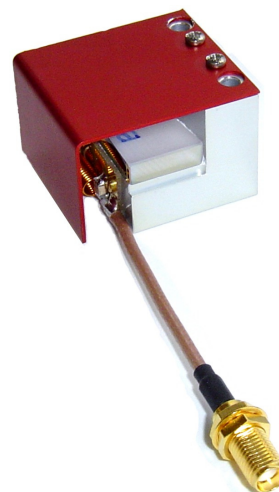
These standard versions are designed for short cavities, with their optical length of 32 mm. Made of crystal quartz for linearly polarized lasers, they can be proposed with various carrier frequencies from 27 up to 80 MHz in order to fit to all kind of cavities. The hard coating with low reflectivity and high quality material assures a high damage threshold > 500 MW/cm².

FEATURES

- Linear Polarization
- 1064 nm design
- Cooling by Conduction through baseplate

APPLICATIONS

- Q-switching
- AO Modulator / Shifter



Parameter	Unit	QCQ40-A1.5-L1064-Z32	QCQ80-A1.2-L1064-Z32
Material-Acoustic mode-Velocity		Crystal QUARTZ - [L] - 5740 m/s	Crystal QUARTZ - [L] - 5740 m/s
Optical Wavelength range	nm	1030..1080	1030..1080
Transmission	%	> 99.6 with hard V-coating	> 99.6 with hard V-coating
Input / Output Polarization		Linear ⊥	Linear ⊥
Carrier Frequency	MHz	40.68	80
Active Aperture	mm ²	1.5 x 1.5	1.2 x 1.2
Operating Mode		BRAGG	BRAGG
Rise / Fall time	ns/mm	115	115
Losses / Diffraction Efficiency	%	Nom 85	Nom 85
Max Optical Peak Power	MW / cm ²	> 500	> 500
Input impedance / V.S.W.R.	Ω	50 / <1.2:1	50 / <1.2:1
RF Power	W	Nom 15	Nom 15
RF Connector / Cable length		SMA / 6 cm	SMA / 6 cm
Heat exchange		Conduction through baseplate	Conduction through baseplate
Optical (path) Length	mm	32	32
Size / Weight	mm ³ / g	(Lxlxh) 33 x 36.5 x 25.8 / 30 IN PRO 181	(Lxlxh) 33 x 36.5 x 25.8 / 30 IN PRO 181
Operating Temperature	°C	+10 to +40	Non condensing

Options / On request

WAVELENGTH	<input checked="" type="checkbox"/> 1342 nm
RF CABLE LENGTH	<input checked="" type="checkbox"/> 15, 20, 25, 35 cm
RF CONNECTOR	<input checked="" type="checkbox"/> BNC

HOW TO DETERMINE THE REFERENCE OF YOUR MODEL:

QCQ40-A1.5-L1064-C25Sa-Z32

WAVELENGTH

- 1064 1030-1080 nm
- 1342 1342 nm

CABLE LENGTH

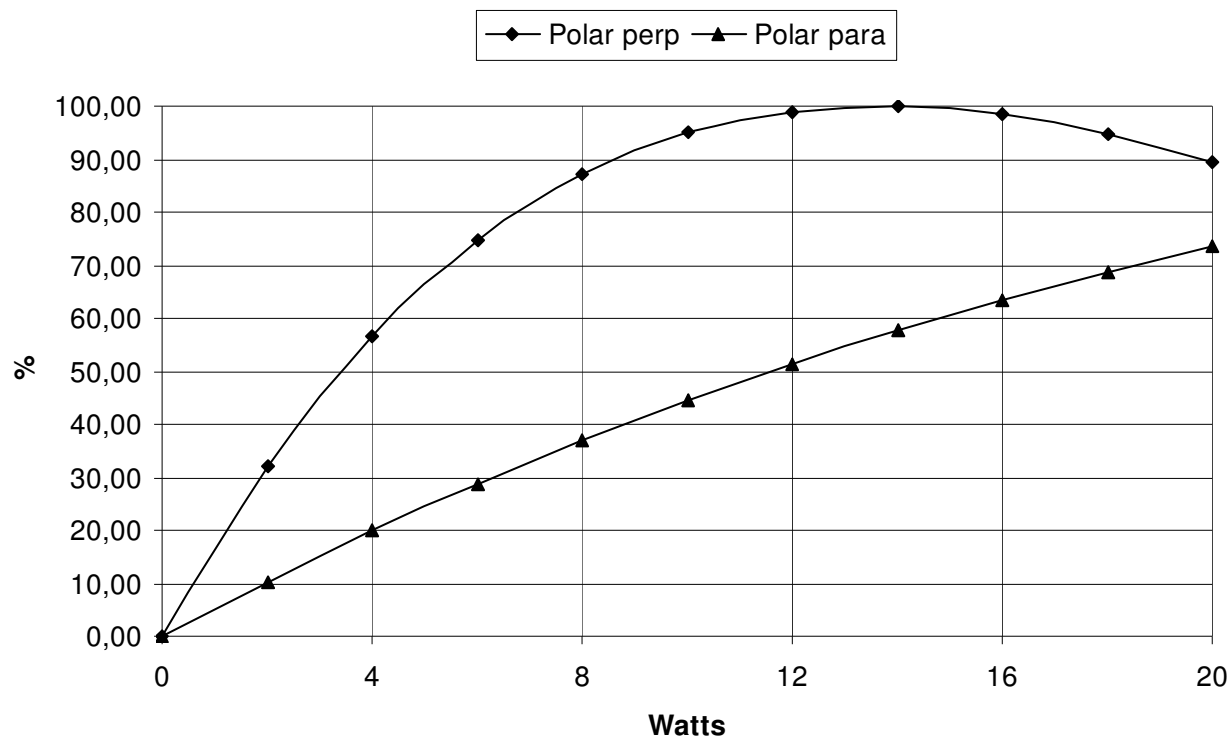
- 6 6 cm
- 15 15 cm
- 20 20 cml
- 25 25 cm
- 35 35 cm

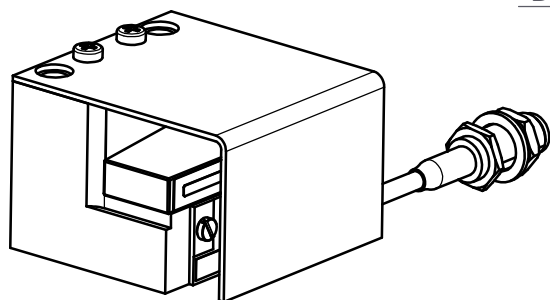
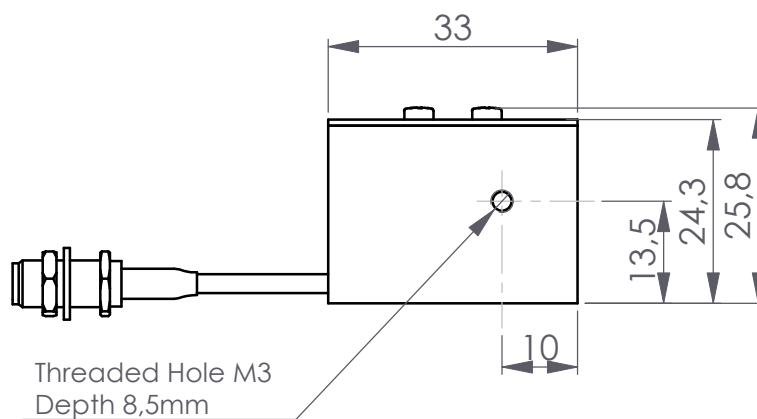
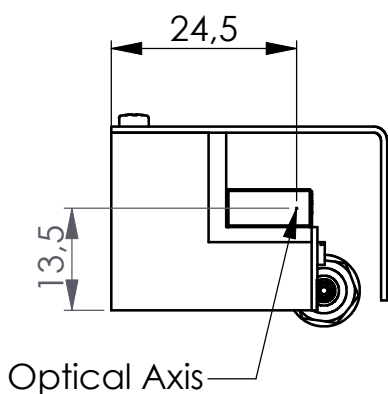
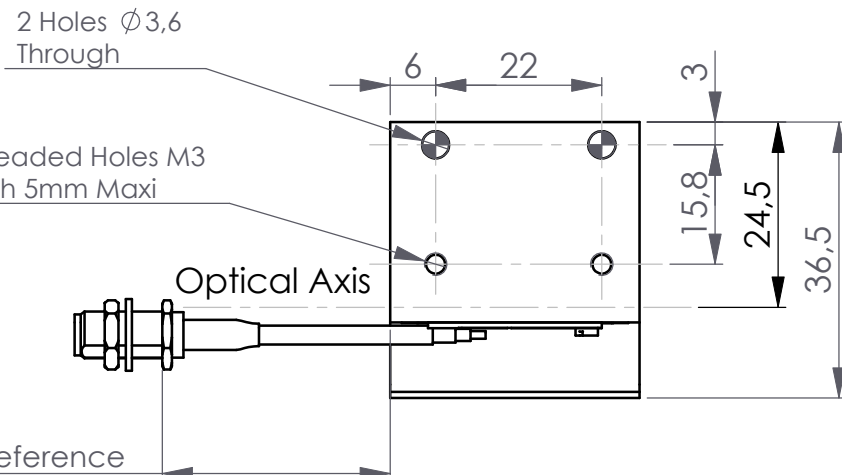
CONNECTOR

- Sa SMA
- Bc BNC

QCQ40-A1,5-L1064			QCQ80-A1,2-L1064		
Beam Diameter	Rise / Fall Time	Max AO Rep Rate	Beam Diameter	Rise / Fall Time	Max AO Rep Rate
mm (1/e ²)	ns	MHz	mm (1/e ²)	ns	MHz
0,6	69	2,3	0,4	46	3,5
0,7	80	2,0	0,5	57	2,8
0,8	92	1,7	0,6	69	2,3
0,9	103	1,5	0,7	80	2,0
1	115	1,4	0,8	92	1,7
1,1	126	1,3	0,9	103	1,5
1,2	138	1,2	1	115	1,4
1,3	149	1,1	xxx	xxx	xx

Normalized AO effic vs Pac





The cap can be removed

Product reference + "-Cxx" + Connector

*"-Cxx" = length of cable in cm
ex : "-C35" = Cable 35cm

*Rf connector:

"Sa" = SMA Bulkhead Crimp

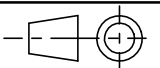
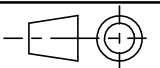
"Sap" = SMA Straight Plug

"Sc" = SMC

"Scc" = SMC Angle Plug

"Bc" = BNC

ex: QCQ...-C6Sa = QCQ with 6cm cable and SMA connector.

B	13/10/09	E.V	Modification référence cable
A	19/07/07	E.D	Plan initial / Initial Drawing
Indice Index	Date	Auteur Author	Modifications
Conception Design	E.D	PLAN D'INTERFACE / OUTLINE DRAWING	
Vérification Checking	L.F		
Tolérance Tolerance	ISO 2768mK	Référence / Reference	
Echelle Scale	1:1	IN-PRO-181	
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