

## QCQxx-Axx-L1064-Z32-Cxx

### Product Overview

These standard versions are designed for short cavities with their optical length of 32 mm. Made of Crystals quartz for linearly polarized lasers, they can be proposed with mainly two different carrier frequencies 40.68 MHz & 80 MHz in order to fit all kind of cavities. The hard coating with low reflectivity and high quality materials assures a high damage threshold > 500MW/cm<sup>2</sup>.



### FEATURES

- 1.06 μm design
- Linear polarization
- Air cooled.
- High damage threshold

### SPECIFICATIONS (T=25°C)

PARAMETER	RATING	UNIT
Material-Acoustic mode-Velocity	Crystal Quartz[L] – 5740	m/s
Transmission	>99	%
Input / Output Polarization	Linear vertical / Linear vertical	
Rise/fall time (T <sub>r</sub> )	115	ns/mm
Static Extinction Ratio	>30	dB
Diffraction efficiency*	>80, nom 85	%
Optical Power density	500	MW/cm <sup>2</sup>
Input impedance	50	Ω
V.S.W.R.	< 1.2:1	
RF Power	15	W
Connector	SMA female, cable length 35	cm
Size	33 x 36.5 x 25.8	mm <sup>3</sup>
Weight	<35	g
Operating Temperature (non condensing)	+10 to +40	°C
Storage Temperature (non condensing)	-40 to +65	°C
RoHS Compliance	Yes	

\*Diffraction efficiency is beam diameter and wavelength dependant

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

# QCQxx-Axx-L1064-Z32-Cxx

## Versions

	QCQ40-A1.5-L1064-Z32-Cxx	QCQ80-A0.8-L1064-Z32-Cxx
Carrier/Shift Frequency	+/- 40 MHz	+/- 80MHz
Active aperture	1.5 x 1.5 mm <sup>2</sup>	0.8 x 0.8 mm <sup>2</sup>
Minimum rise time	80 ns (Ø 0.7 mm)	30 ns (Ø 0.26mm)
Separation angle (0-1)	>14.8 mrd	>29.6 mrd
Maximum RF power	15 W	15 W
Packaging	IN PRO 181	IN PRO 181

## OUTLINE DRAWING IN PRO 181, mm

