

# QCQxx L Z32

# ..... AO Q-SWITCH

## Q-switch for 1064 nm lasers

- 1.06  $\mu\text{m}$  design • Linear Polarization
- Conduction through baseplate

These standard versions are designed for short cavities, with their optical length of 32 mm.

Made of quartz for linearly polarized lasers, they are 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  $> 500 \text{ MW/cm}^2$ .



## Specifications

Material	Crystal QUARTZ
Acoustic Velocity	$V = 5740 \text{ m/s (L)}$
Optical Wavelength range	1064 nm
Transmission	$> 99.5 \%$ with hard V-coating
Optical Input / Output polarizations	Linear $\perp$
Aperture	$1.5 \times 1.5 \text{ mm}^2$
Carrier frequency / Frequency shift	40.68 MHz (other on request)
Operating mode	Bragg
Diffraction efficiency (with TEM00 beam, $M^2 \leq 1.1$ )	Nom 80 %
Rise/Fall time	115 ns/mm
Max optical peak power density	$> 500 \text{ MW/cm}^2$
Input impedance	Nom 50 $\Omega$
V.S.W.R.	Nom $< 1.2/1$
RF Power	Nom 10 to 20 Watts
RF Connector	SMA
Heat exchange	Conduction through baseplate
Optical path length	32 mm
Size / Weight	(Lxlxh) $33 \times 36.5 \times 25.8 \text{ mm}^3 / 30 \text{ g}$
Operating Temperature	10 to 40 $^\circ\text{C}$



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# QCQxx-Ay-L1064

**XX = carrier frequency 40.68 (on request 27.12 or 80 MHz)**

**Y = (aperture, mm) = 1.5 (other on request)**

## Outline Drawing

sizes in mm

