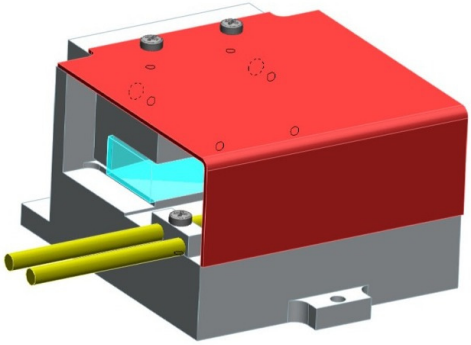
QCQxx L Z42 ..... AO Q-SWITCH

Q-switch for 1064 nm lasers
Large aperture – Air cooling



• 1.06 µm design • Linear Polarization
• Conduction through baseplate

These versions are designed for medium / short cavities, with their optical length of 42 mm, and their very high efficiency. They also can usefully replace water cooled Q-switches and thus avoid corrosion of the water cooled circuit. Please note that the mechanical layout is compatible with water cooled elements.

Made of 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.

Specifications

Material	Crystal QUARTZ
Acoustic Velocity	V = 5740 m/s (L)
Optical Wavelength range	1064 nm
Transmission	> 99.5 % with hard V-coating
Optical Input / Output polarizations	Linear ⊥
Aperture	2.5 x 2.5 mm²
Carrier frequency / Frequency shift	40.68 MHz (other on request)
Operating mode	Bragg
Diffraction efficiency (with TEM00 beam, M² ≤ 1.1)	Nom 90 %
Rise/Fall time	115 ns/mm
Max optical peak power density	> 500 MW/cm²
Input impedance	Nom 50 Ω
V.S.W.R.	Nom < 1.2/1
RF Power	Nom 20 Watts
RF Connector	SMA
Thermal security switch	Short Circuit = Enable; Open Circuit Disable
Heat exchange	Conduction through baseplate
Optical path length	42 mm
Size / Weight	(Lxlxh) 52.2 x 62 x 33.8 mm³ / 50 g
Operating Temperature	10 to 40 °C

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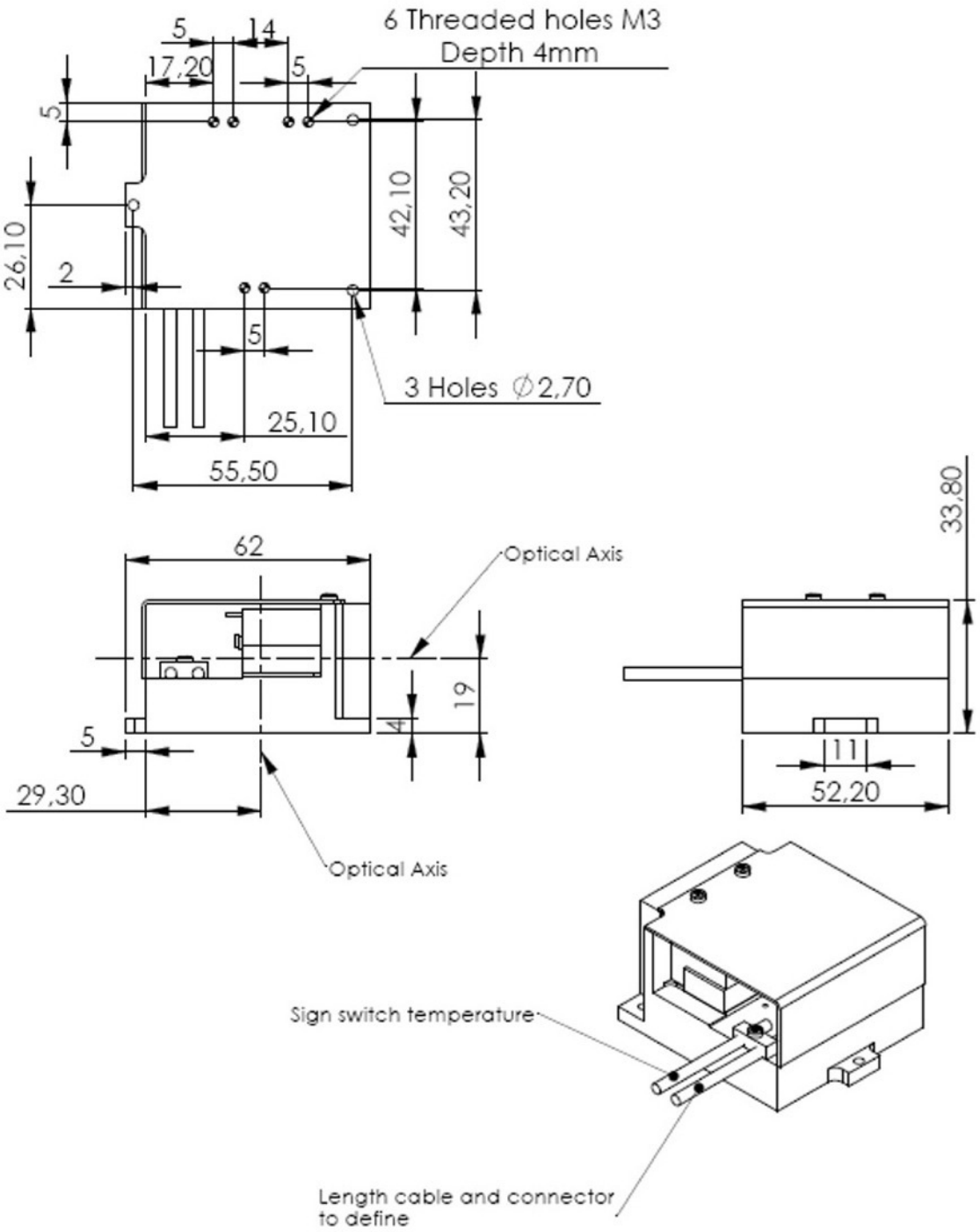
QCQ40-A2.5-L1064-Z42

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

Y = (aperture, mm) **= 2.5 mm (other on request)**

Outline Drawing

sizes in mm



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