

MCQxx-Ax-L1064-Z32-Cxx

Product Overview

These modulators are made of Quartz and due to their hard V-coating with low reflectivity, they have got high damaged threshold. They are mainly intended for intensity modulation in high optical power applications but can be used for fixed frequency shifting as well: +/- 40 MHz or 80 MHz.



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 |
| Wavelength range | 1030-1080 | nm |
| Transmission | >99 | % |
| Input / Output Polarization | Linear vertical / Linear vertical | |
| Rise/fall time (T _r) | 115 | ns/mm |
| Static Extinction Ratio | >30 | dB |
| Diffraction efficiency* | >80, nom 85 | % |
| Optical Power density | 500 | MW/cm ² |
| 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 ³ |
| 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.

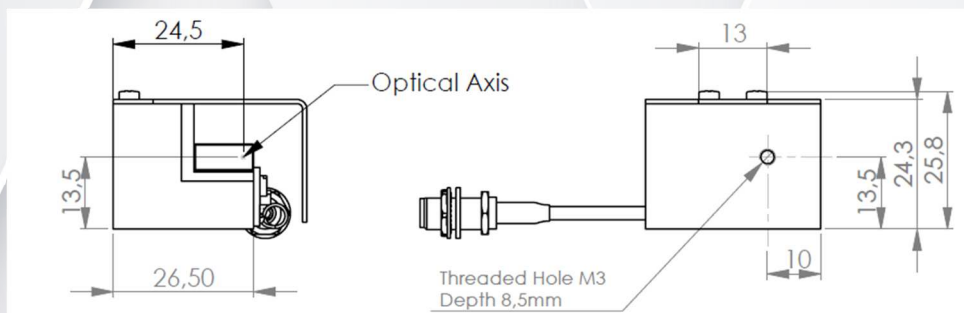
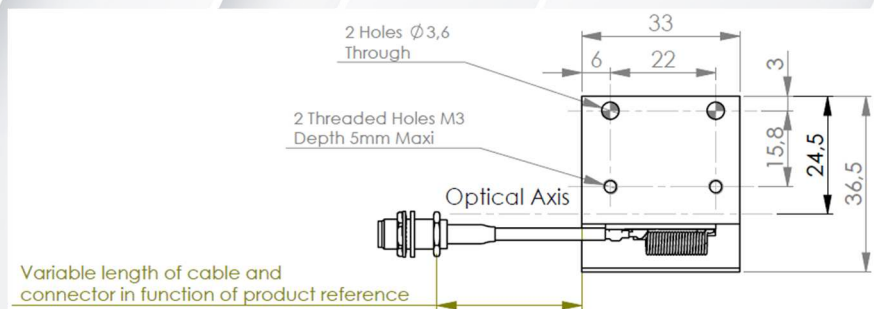
$$T_r = 0.66 \frac{\phi}{V} * F_{-3dB} = \frac{0.48}{T_r} * \Delta\theta = \frac{\lambda F}{V} * \frac{P_1}{P_2} = \frac{\lambda_1}{\lambda_2}$$

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Versions

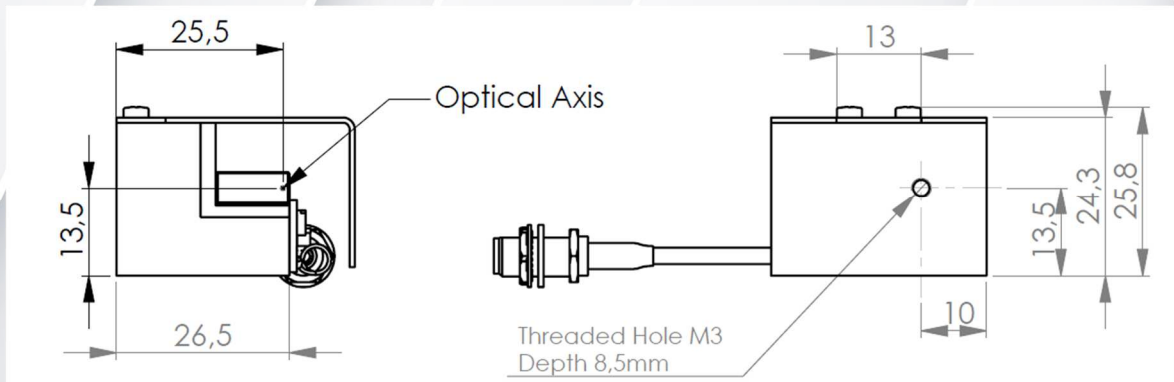
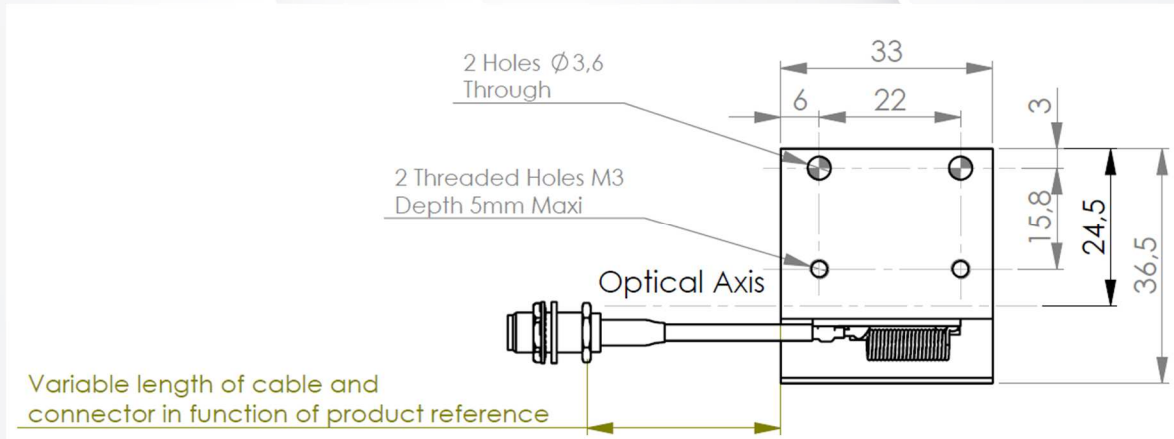
| | MCQ40-A1.5-L1064-Z32-Cxx | MCQ80-A2-L1064-Z32-Cxx | MCQ80-A0.8-L1064-Z32-Cxx |
|-------------------------|---------------------------|------------------------|---------------------------|
| Carrier/Shift Frequency | +/- 40 MHz | +/- 80 MHz | +/- 80MHz |
| Active aperture | 1.5 x 1.5 mm ² | 2x2 mm ² | 0.8 x 0.8 mm ² |
| Minimum rise time | 80 ns (Ø 0.7 mm) | 80 ns (Ø 0.7mm) | 30 ns (Ø 0.26mm) |
| Separation angle (0-1) | >14.8 mrd | >29.6 mrd | >29.6 mrd |
| Maximum RF power | 15 W | 15 W | 15 W |
| Packaging | IN PRO 181 | IN PRO 343 | IN PRO 406 |

OUTLINE DRAWING IN PRO 181, mm



MCQxx-Ax-L1064-Z32-Cxx

OUTLINE DRAWING IN PRO 406, mm



MCQxx-Ax-L1064-Z32-Cxx

OUTLINE DRAWING IN PRO 343, mm

