

PM FIBER-Q®

Polarization Maintaining 1550 nm Fiber Coupled Acousto-Optic Modulator

T-M080-0.4C2J-3-F2P

The T-M080-0.4C2J-3-F2P acousto-optic modulator is designed for use as an 80 MHz frequency shifter for heterodyne interferometry, an intensity modulator or a pulse picker.

Gooch & Housego specialize in providing optical components for high power fiber laser and amplifier systems. In-house control of critical manufacturing processes; from crystalline material selection and orientation, cutting, polishing and anti-reflection coating through to fiber coupling, ensure our components are of the highest optical quality.

In addition to the standard product shown, custom configurations are available for specialized applications.



Key Features

- Low insertion loss
- Compact low profile package
- Rugged hermetic design
- Stable performance
- Custom configurations available

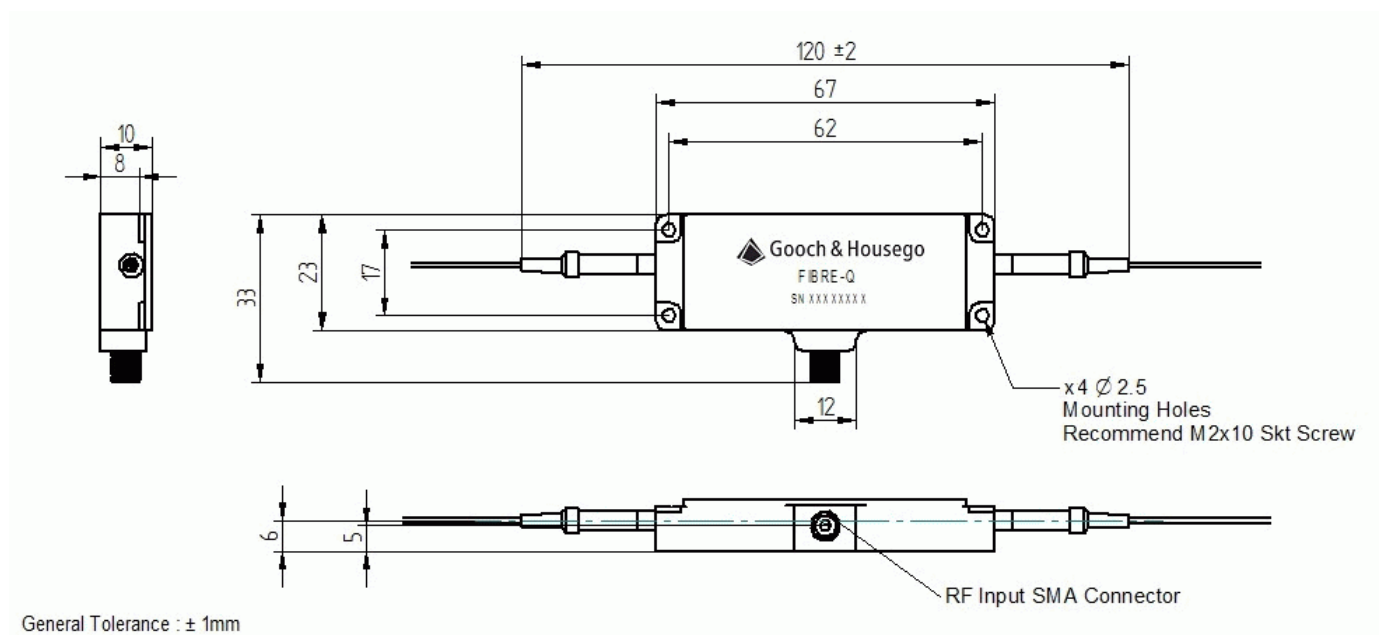
Applications

- Sensing (heterodyne interferometry)
- Intensity modulation
- Pulse picking

POLARIZATION-MAINTAINING 1550 NM FIBER-COUPLED ACOUSTO-OPTIC MODULATOR

General Specifications

| Parameter | Min | Max | Typical | Comments |
|----------------------------------|---------|---------|-------------|---|
| Interaction material | - | - | - | Tellurium dioxide |
| Wavelength | 1530 nm | 1565 nm | 1550 nm | Other wavelengths available on request |
| Average optical power handling | - | 1 W | - | |
| Peak optical power handling | - | 1 kW | - | Dependent on pulse width |
| Insertion loss | - | 3 dB | 2 dB | |
| Polarization extinction ratio | 18 dB | - | 20 dB | |
| Extinction ratio | 50 dB | - | - | |
| Return loss (RF ON/RF OFF) | 40 dB | - | - | |
| Rise-time/fall-time: (10% - 90%) | - | 35 ns | - | |
| Frequency | - | - | 80 MHz | |
| VSWR | - | 1.2:1 | - | |
| Input impedance | - | - | 50 Ω | |
| RF power | - | 3 W | - | Absolute maximum rating. Higher power will cause damage. |
| Frequency shift | - | - | 80 MHz | Upshift |
| Fiber type | - | - | - | Fujikura PM1550 (SM15-PS-U25A) or equivalent |
| Fiber length | 1.5 m | - | - | 900 μ m PVDF sleeving |
| Fiber termination | - | - | - | Bare fiber |



Other products which may be of interest

- HI REL couplers
- High power multimode combiners
- Combiners with all types of signal feedthrough fiber
- Ultra-low ratio tap couplers
- WDMs for combining signals with red pointer lasers
- OCT wideband couplers

For further information

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