

FIBER-Q®

1550 nm Fiber Coupled Acousto-Optic Modulator (Low Power Consumption)

T-M080-0.5C8|-3-F2S

The T-M080-0.5C8J-3-F2S acoustooptic modulator is designed for use as an 80 MHz frequency shifter for heterodyne interferometry or as an intensity modulator.

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 specialised applications



Key Features

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

Applications

- Sensing (heterodyne interferometry)
- Intensity modulation







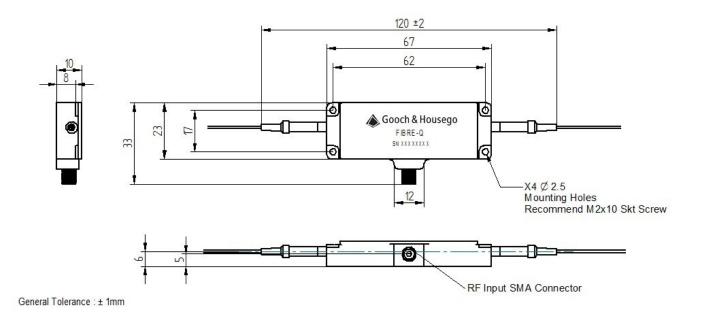
1550 NM FIBER COUPLED ACOUSTO-OPTIC MODULATOR (LOW POWER CONSUMPTION)



General Specifications

| Parameter | Min | Max | Typical | Comments |
|----------------------------------|---------|---------|---------|--|
| Interaction material | - | - | - | Amtir |
| 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 | - | 2.5 dB | - | |
| Polarization dependant loss | - | 0.1 dB | - | |
| Extinction ratio | 50 dB | - | - | |
| Return loss (RF ON/RF OFF) | 40 dB | - | - | |
| Rise-time/fall-time: (10% - 90%) | - | 100 ns | 70 ns | |
| Frequency | - | - | 80 MHz | |
| VSWR | - | 1.5:1 | - | |
| Input impedance | - | - | 50 Ω | |
| RF power | - | 0.4 W | 0.3 W | Absolute maximum rating. Higher power will cause damage. |
| Frequency shift | - | - | 80 MHz | Upshift |
| Fiber type | - | - | - | SMF28 |
| Fiber length | 1.5 m | - | - | 900µm 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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