

## PM FIBER-Q®

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

T-M080-0.5C8J-3-F2P

The T-M080-0.5C8J-3-F2P acousto-optic 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 fibre laser and amplifier systems. In-house control of critical manufacturing processes, from crystalline material selection and orientation, cutting, polishing and anti-reflective 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
- Low power consumption
- Custom configurations available

#### Applications

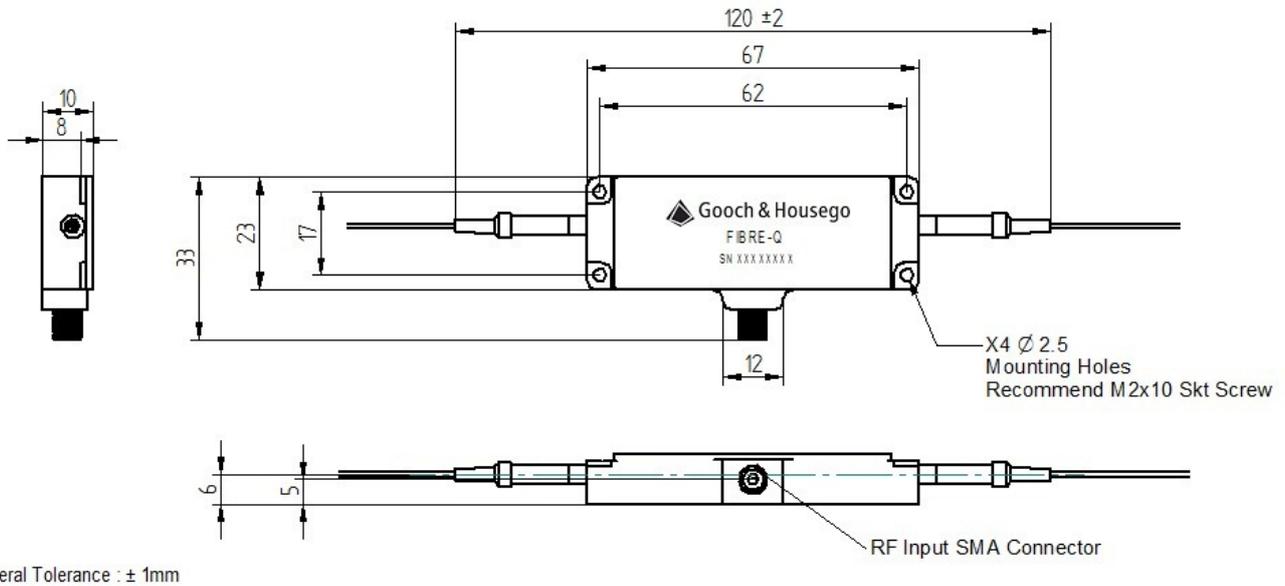
- Sensing (heterodyne interferometry)
- Intensity modulation



POLARIZATION MAINTAINING 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 extinction ratio	18 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 $\Omega$	
RF power	-	0.4 W	0.3 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 $\mu$ m PVDF sleeving
Fiber termination	-	-	-	Bare



### 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