

# FIBER-Q®

### 1310 nm Fiber Coupled Acousto-Optic Modulator

T-M040-0,5C8H-3-F2S/T-M040-0,5C8H-3-F2P1

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 AR 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**

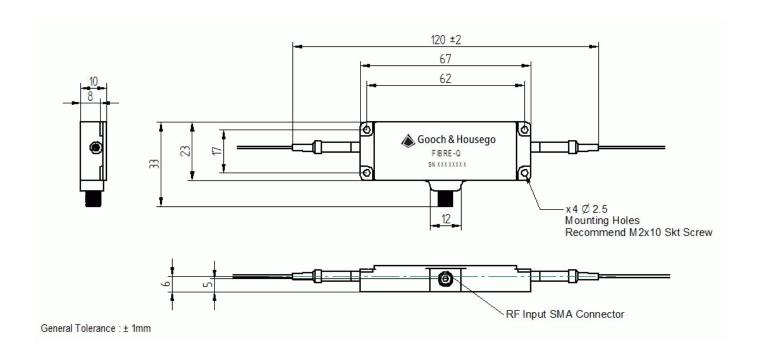
- Sensing (heterodyne interferometry)
- Intensity modulation



## **General Specifications**

Parameter	Min	Max	Typical	Comments
Interaction material	-	-	-	Tellurium dioxide
Wavelength	-	-	1310 nm	
Average optical power handling	-	1 W	-	
Peak optical power handling	-	1 kW	-	Dependent on pulse width
Insertion loss	-	3.5 dB	-	
Polarization dependent loss	-	0.1 dB	-	
Polarization extinction ratio <sup>1</sup>	18 dB	-	-	
Extinction ratio	50 dB	-	-	
Return loss (RF ON/RF OFF)	40 dB	-	-	
Rise-time/fall-time: (10%-90%)	-	100 ns	70ns	
Frequency	-	-	40 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	-	-	40 MHz	Upshift
Fiber type	-	-	-	SMF28 / Nufern PM1300-XP <sup>1</sup> or equivalent
Fiber length	1.5 m	-	_	900 μm 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