

FIBER-Q®

1060 nm Fiber Coupled Acousto-Optic Modulator

T-M300-0.1C2G-3-F2S & T-M300-0.1C2G-3-F2P¹

The Fiber-Q® acousto-optic modulator is designed for use in pulsed fiber laser amplifier systems and as a pulse picker for short pulse, high rep rate fiber lasers.

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

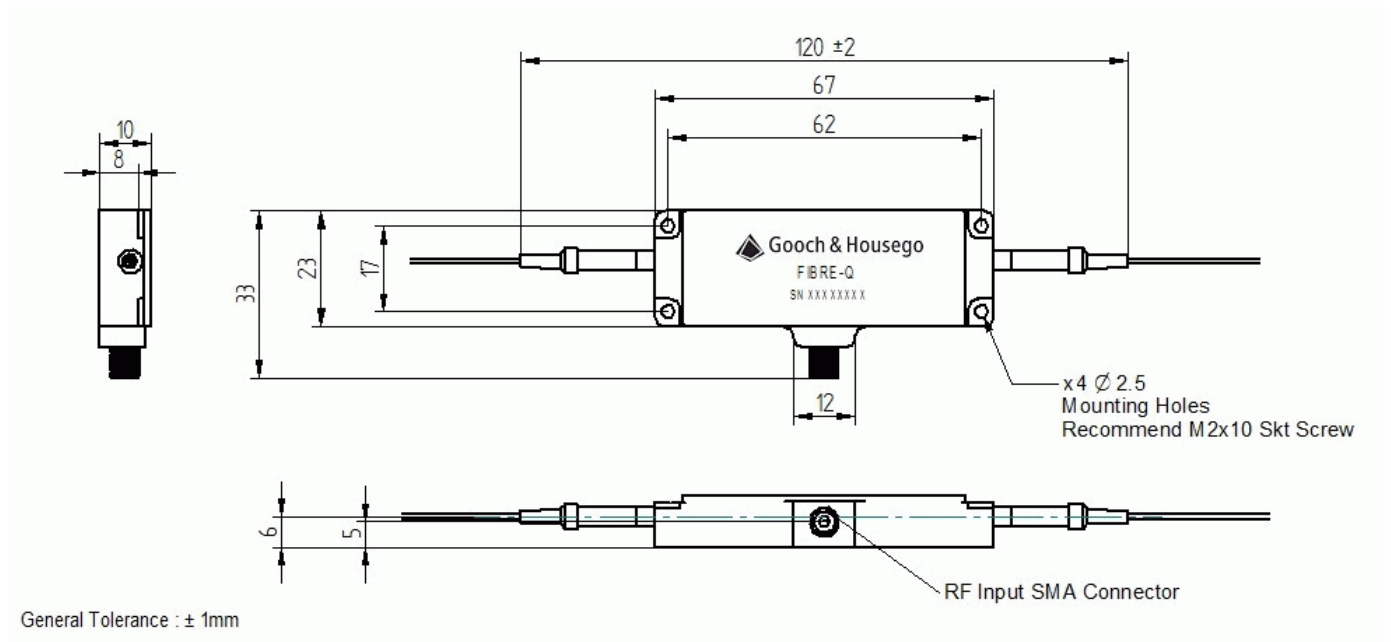
- Low insertion loss
- Compact low profile package
- Rugged hermetic design
- Stable performance
- Custom configurations available
- Fast switching speed

Applications

- Fiber laser
- Pulse picker
- Optical sensing

General Specifications

Parameter	Min	Max	Typical	Comments
Interaction material	-	-	-	Tellurium dioxide
Wavelength	1030 nm	1090 nm	1060 nm	
Average optical power handling	-	0.5 W	-	
Peak optical power handling	-	0.25 kW	-	Dependent on pulse width
Insertion loss	-	3 dB	-	
Polarization dependant loss	-	0.5 dB	-	
Polarization extinction ratio ¹	15 dB		20	
Extinction ratio	50 dB	-	-	
Return loss (RF ON/RF OFF)	40 dB	-	-	
Rise-time/fall-time: (10% - 90%)	-	6 ns	-	
Frequency	-	-	300 MHz	
VSWR	-	1.5:1	-	
Input impedance	-	-	50 Ω	
Peak RF power	-	5 W	-	Max duty cycle 20% Max pulse-length 1 μ s
Fiber type	-	-	-	HI1060 Fujikura PM980 ¹ 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