



# Gooch & Housego



## Fibre-Q

### 1550nm Fibre-Coupled Acousto-Optic Modulator

T-M110-0.2C2J-3-F2S

Gooch & Housego specialise 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 AR coating through to fibre coupling, ensure our components are of the highest optical quality.

The T-M110-0.2C2J-3-F2S Acousto-Optic Modulator is designed for use as an 110MHz frequency shifter for heterodyne interferometry, an intensity modulator or a pulse picker.

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

#### Key Features:

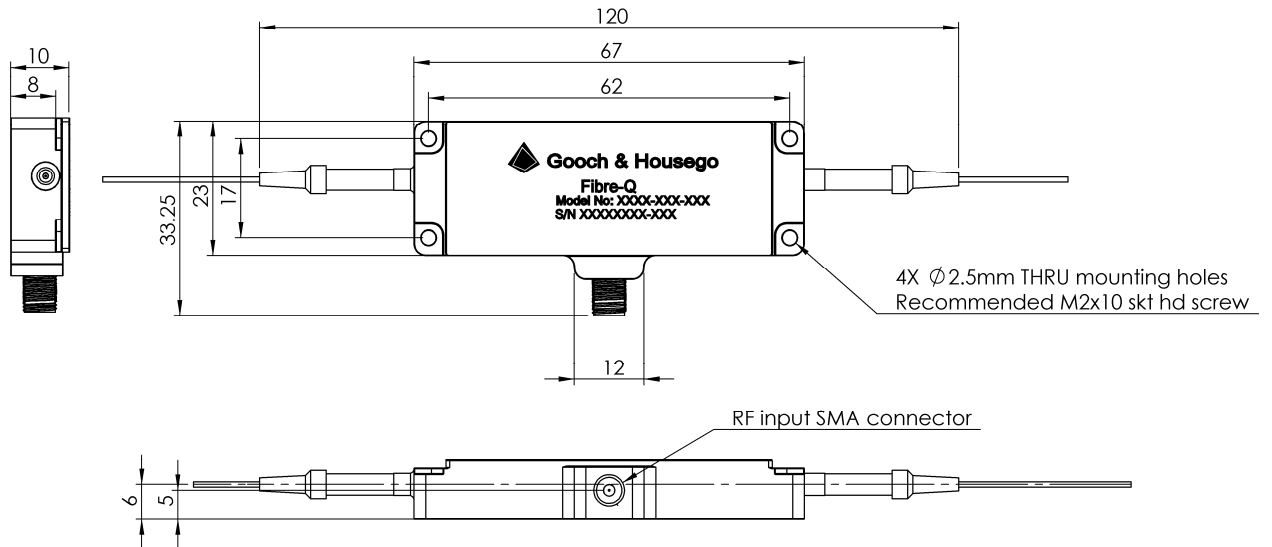
- Low insertion loss
- Compact, low profile package
- Rugged hermetic design
- Stable performance
- Custom configurations available

#### Applications:

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

### General Specifications

Parameter	Unit	Min	Max	Typical	Comments
Interaction material:	-	-	-	-	Tellurium Dioxide
Wavelength:	nm	1530	1565	1550	Other wavelengths available on request
Average optical power handling:	W	-	1	-	
Peak (pulse) optical power handling:	kW	-	1	-	Dependent on pulse width
Insertion loss:	dB	-	3	2	
Polarisation Dependant Loss (RF-ON)	dB	-	0.3	0.2	
Extinction ratio (1 <sup>st</sup> order on / off)	dB	50	-	-	
Return Loss (RF ON / RF OFF)	dB	40	-	-	
Rise-time / fall-time: (10% - 90%)	ns	-	25	-	
Frequency:	MHz	-	-	110	
VSWR:		-	1.2:1	-	
Input impedance:	$\Omega$	-	-	50	
RF power:	W	-	3	-	Absolute maximum rating. Higher power will cause damage.
Frequency shift:	MHz	-	-	110	Upshift
Fibre type:	-	-	-	-	SMF28
Fibre length	m	1.5	-	-	900 $\mu$ m PVDF sleeving
Fibre termination:	-	-	-	-	Bare Fibre



**Other Gooch & Housego products which may be of interest:**

Our extensive range of components for fibre laser applications includes:

- Isolators
- High power multimode combiners
- Combiners with all types of signal feedthrough fibre
- Ultra low ratio tap couplers
- WDMs for combining signals with red pointer lasers

Please send your specifications to [sales@goochandhousego.com](mailto:sales@goochandhousego.com) or contact your local sales representative to discuss your requirements.