



PM FIBER-Q®

Polarization Maintaining 1550 nm Fiber Coupled Acousto-Optic Modulator

T-M040-0.5C8J-3-F2P

The T-M040-0.5C8J-3-F2P Acousto-Optic Modulator is designed for use as a 40MHz 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 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

PEC0169 Issue 3

As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.



December 2016

Page 1



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	-	20 dB	
Extinction ratio	50 dB	-	-	
Return loss (RF ON/RF OFF)	40 dB	-	-	
Rise-time/fall-time: (10% - 90%)	-	100 ns	70 ns	
Frequency	-	-	40 MHz	
VSWR	-	1.5:1	-	
Input impedance	-	-	50 Ω	
RF power	-	0.4 W	0.25 W	
Frequency shift	-	-	40 MHz	Upshift
Fiber type	-	-	-	Fujikura PM1550 (SM15-PS-U25A) or equivalent
Fiber length	1.5 m	-	-	900 μ m PVDF sleeving
Fiber termination	-	-	-	Bare fiber

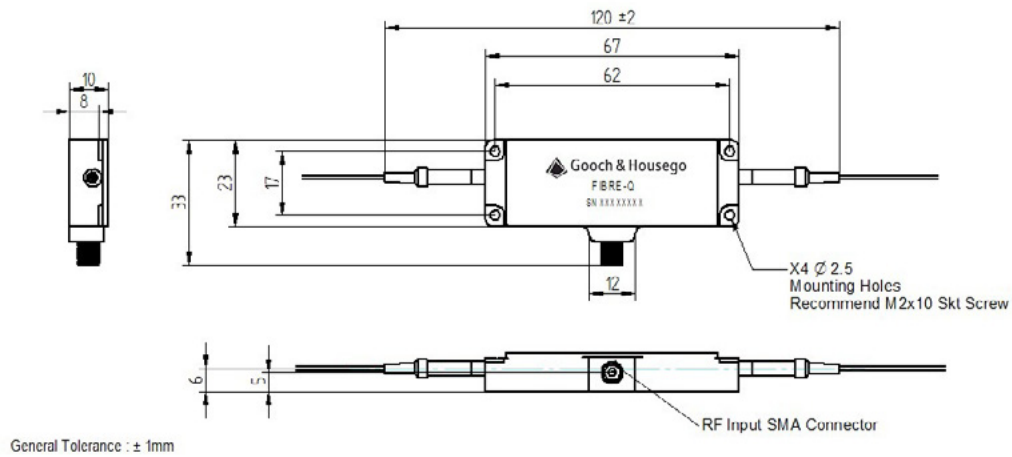
POLARIZATION MAINTAINING 1550 NM FIBER COUPLED ACOUSTO-OPTIC MODULATOR

PEC0169 Issue 3

As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.

December 2016

Page 2



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

POLARIZATION MAINTAINING 1550 NM FIBER COUPLED ACOUSTO-OPTIC MODULATOR

PEC0169 Issue 3

As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.

December 2016

Page 3