

PM FIBER-Q®
Polarization Maintaining 1550 nm
Fiber Coupled Acousto-Optic Modulator
STG-T-M200-0.1C2J-3-F2P



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.

We 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.

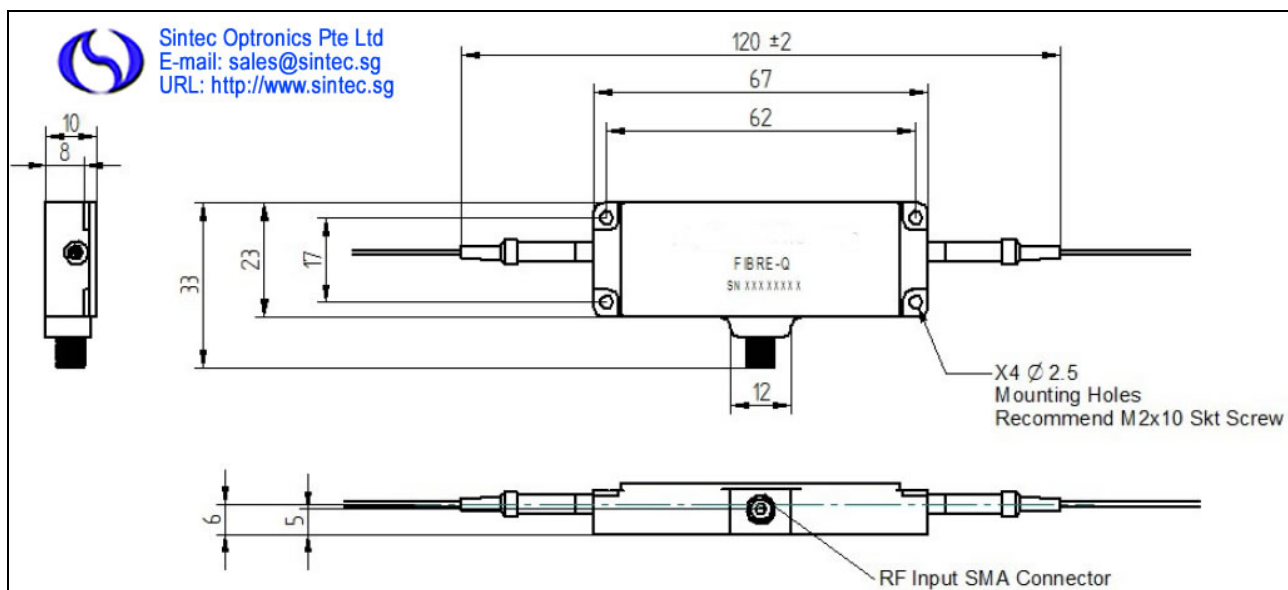
Key Features

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

Applications

- Fiber laser
- Pulse picker
- Optical sensing

| Parameter | Min | Max | Typical | Comments |
|---------------------------------|---------|---------|-------------|--|
| Interaction material | - | - | - | Tellurium dioxide |
| Wavelength | 1530 nm | 1565 nm | 1550 nm | Other wavelengths available on request |
| Average optical power handling | - | 1 W | - | |
| Peak optical power handling | - | 1 kW | - | Dependant on pulse width |
| Insertion loss | - | 6.0 dB | 5.0 dB | |
| Polarization extinction ratio | 15 dB | - | 20 dB | |
| Extinction ratio (ER) | 50 dB | - | - | |
| Return loss (RF ON/RF OFF) | 40 dB | - | - | |
| Rise-time/fall-time (10% - 90%) | - | 10 ns | - | Does not include RF Driver rise / fall time |
| Frequency | - | - | 200 MHz | |
| VSWR | - | 1.5:1 | - | |
| Input impedance | - | - | 50 Ω | |
| RF power | - | 2.5 W | - | Absolute maximum rating (Higher power will cause damage) |
| Frequency shift | - | - | 200 MHz | Up-shift |
| Fiber type | - | - | - | Fujikura PM1550 (SM15-PS-U25A) 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