

Key Features – Cryo Flux BiasT Array

- Main application: Flux-biasing of superconducting qubits
- Array of 12 cryogenic BiasT circuits
- Highly linear and first-order transfer function
- 10 kHz to 1 GHz frequency range for RF
- Optimized for low thermal dissipation
- Compatible with Bluefors twisted pair DC wiring (Micro-D)
- SMP connector interface for RF and RF+DC
- Low insertion- and high return-loss
- Gold-plated OFHC copper casing



Cryo Flux BiasT Gold-plated OFHC copper casing.

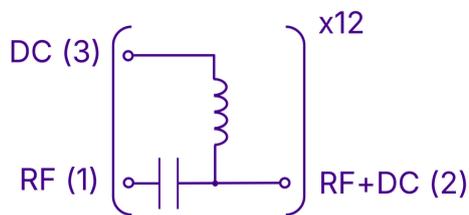
Absolute Maximum Ratings

DC input current	+/-25 mA
RF pulse amplitude	+/- 20 V
Operating temperature	10 mK to 4 K

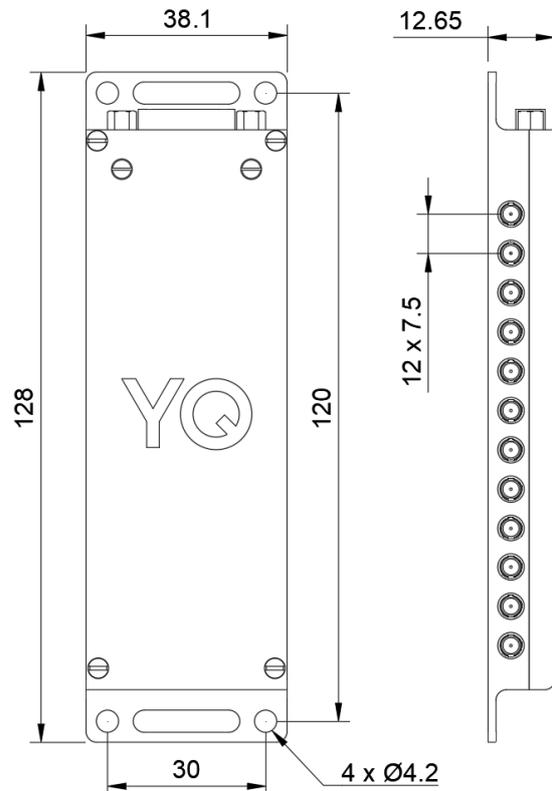
Typical Performance

RF frequency	10 kHz – 1 GHz
Insertion loss	< 1.0 dB
Return loss	> 13.0 dB

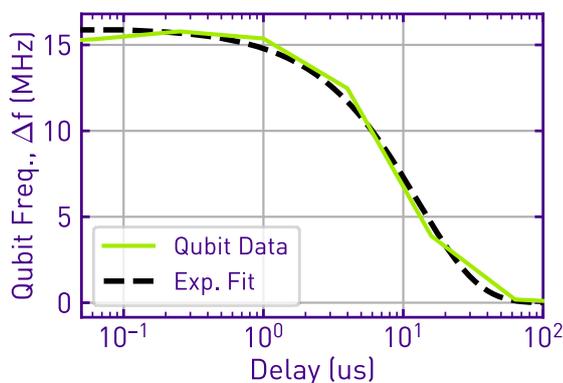
Circuit Schematic



Drawing Casing [mm]



Qubit Step Response*



* Qubit frequency measured as a function of flux pulse delay. The measured response (green) agrees well with a simple, first-order model, see black dashed line ($\sim e^{-t/\tau}$).