

Datasheet, YQ-BT-2G

10 kHz - 2 GHz, 50 Ω

Key Features - Flux BiasT

- Main application: Flux-biasing of superconducting qubits
- · Highly linear and first-order transfer function
- · 10 kHz to 2 GHz frequency range for RF
- Low-pass filter for DC with 10 Hz cutoff and 60 dB of suppression up to 1 GHz
- Precision $1 k\Omega^*$ (±5 ppm/°C) bias resistor for DC path *Contact YQuantum for different bias resistance values
- · Low insertion- and high return-loss



Flux BiasT Aluminum casing Mounting holes on backside

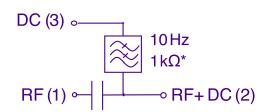
Absolute Maximum Ratings

DC input voltage	+/-20 V
RF input power	+32 dBm
Operating temperature	-55 to 85 °C

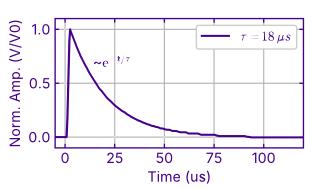
Typical Performance

RF frequency	10 kHz – 2 GHz
Insertion loss	< 1.0 dB
Return loss	> 16.0 dB

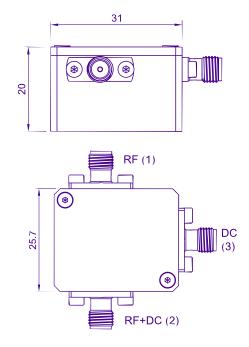
Circuit Schematic



Step Response into 50Ω



Drawing Casing [mm/in]



Scattering-Parameters

