

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 Ω (± 5 ppm/ $^{\circ}$ C) bias resistor for DC path
- Low insertion- and high return-loss



*BiasT Aluminum casing
Mounting holes on backside*

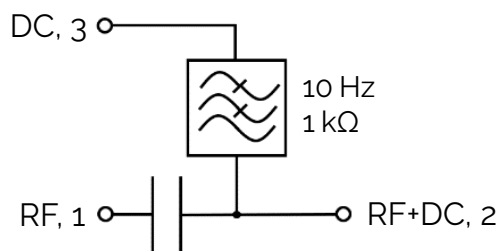
Absolute Maximum Ratings

DC input voltage	+/-20 V
RF input power	+32 dBm
Operating temperature	-55 to 85 $^{\circ}$ C

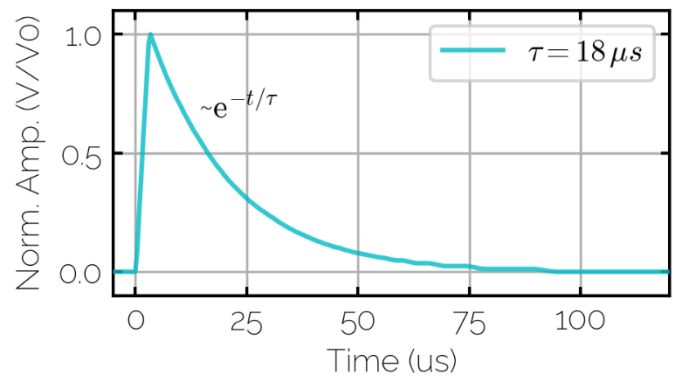
Typical Performance

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

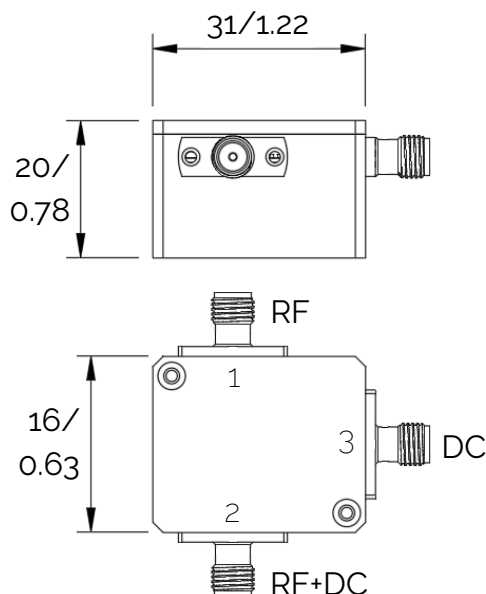
Circuit Schematic



Step Response into 50 Ω



Drawing Casing [mm/in]



Scattering-Parameters

