



6.0 - 8.0 GHz Cryogenic

- Circulators
- Isolators
- Directional Couplers

Exceptional broadband performance down to mK range.

Certified to AS9100 and RoHS

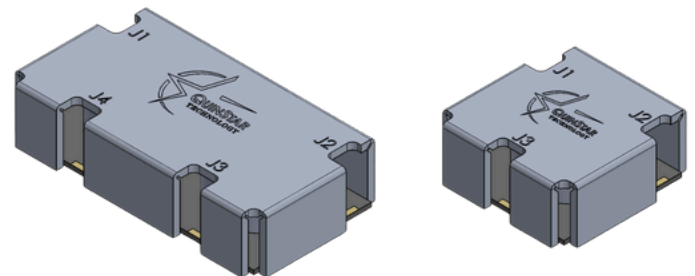
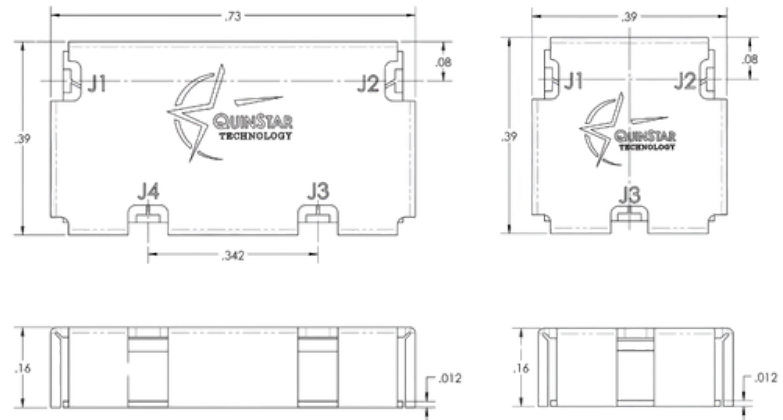
QuinStar is pioneering quantum technology with our Surface-Mount Technology devices (SMT)

QCO-G06008010 / QCD-G06008010

QCO-G06008020 / QCD-G06008020

Key Performance Features

- **Ultra-compact SMT footprint** designed for dense system integration & scalability.
- **Standard RF interface: Microstrip**
- **Multiple magnetic shielding options available:**
 - **Standard cover** with OFHC copper
 - **Mu-metal option** for magnetic shielding without increasing unit size
- **Each unit tested** and validated for Return Loss, Insertion Loss, and Isolation at 4K



About QuinStar

QuinStar (Pamtech) is a technology company producing cryogenic isolators and circulators for over 40 years. Our comprehensive onsite capabilities and experienced team keep us at the leading edge of cryogenic product development. We continually advance SOA performance and trim unit size to meet emerging requirements.

Engineering MW and MMW solutions since 1993



Here's what's next for our SMT line. QuinStar is working toward continual miniaturization and optimization of qubit readout.

- 4 - 6 GHz in development
- 2 - 3 GHz in development
- 1 - 2 GHz in development

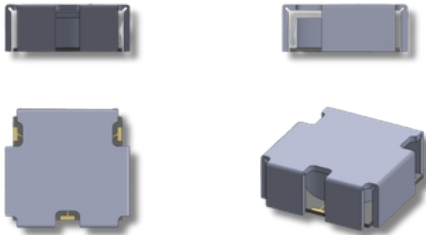
6.0 - 8.0 GHz Cryogenic Circulators and Isolators

Exceptional broadband performance
4K down to mK range. Applications include:

- Quantum Computing
- Space Applications
- Radio Astronomy
- Particle Physics Research

Single Junction Circulator / Isolator

QCO-G06008010 / QCD-G06008010

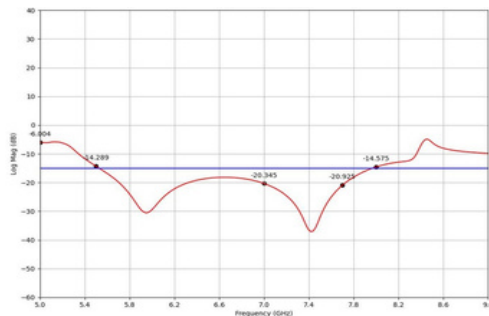


Typical at 4K:

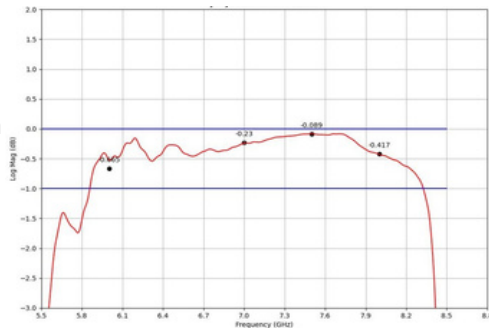
Return Loss 18.0 dB
Insertion Loss 0.40 dB
Isolation 18.0 dB

Typical Data for Single Junction

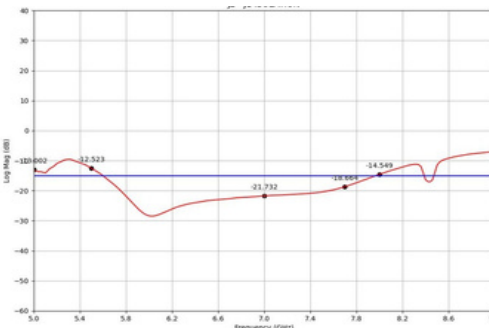
Return Loss (@4K)



Insertion Loss (@4K)

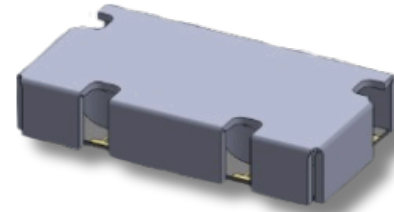


Isolation Loss (@4K)



Double Junction Circulator / Isolator

QCO-G06008020 / QCD-G06008020

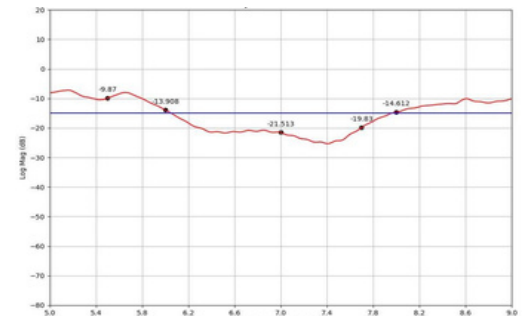


Typical at 4K:

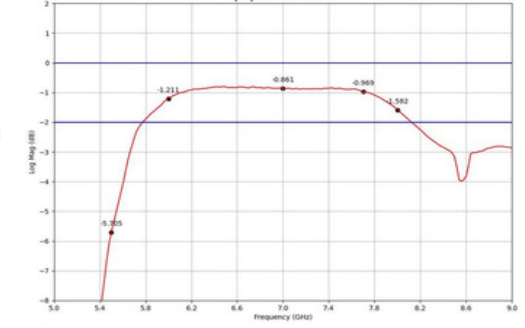
Return Loss 18.0 dB
Insertion Loss 1.20 dB
Isolation 36.0 dB

Typical Data for Double Junction

Return Loss (@4K)



Insertion Loss (@4K)



Isolation Loss (@4K)

