

QMC-CRYOIRF-004

Cryogenic High Cut-Off Frequency Infrared Filter

Key Features

- Cryogenic High Cut-Off Frequency Infrared Filter
- IR filter to enhance Qubit Performance
- Based on Magnetically loaded dielectric absorber
- Eccosorb CR 110
- Length of absorber region 20 mm
- Impedance 50 Ω
- Housing gold plated OFHC Copper
- Various connector configurations



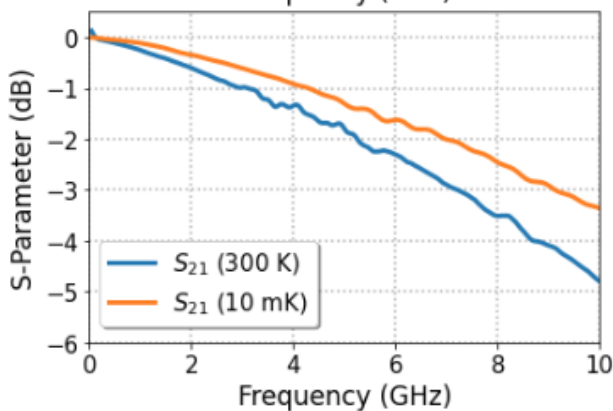
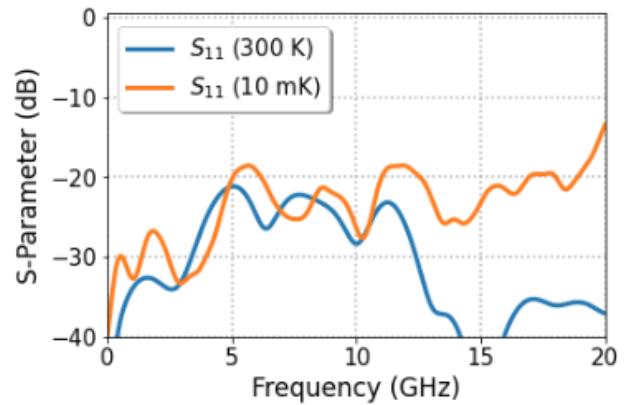
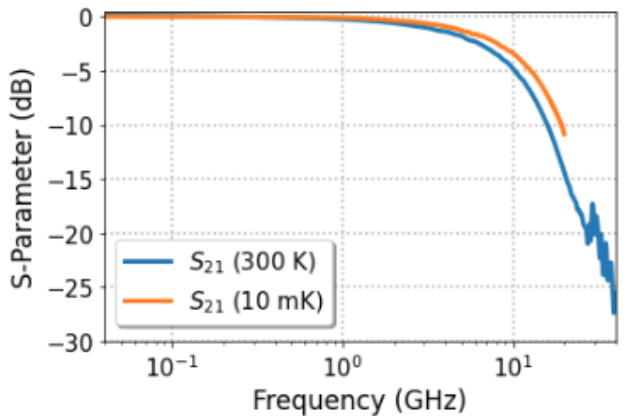
QMC-CRYOIRF-004MF-S

QMC-CRYOIRF-004

Performance

Frequency	DC – 10 GHz
Insertion loss (10 mK)	4 dB @ 10 GHz
Return loss (10 mK)	20 dB

Scattering Parameters



IR filters were characterized cryogenically in a dilution refrigerator utilizing the Quantum Microwave testing services. For more information on testing services offered contact sales@QuantumMicrowave.com

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Connector Configurations

QMC-CRYOIRF-004 series available in the following connector configurations (order number)



**SMA male-female
(QMC-CRYOIRF-004MF-S)**

**SMA female-female
(QMC-CRYOIRF-004-S)**



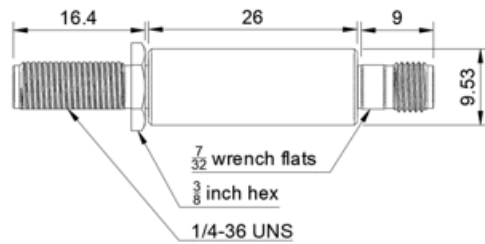
**SMA Bulkhead female-female
(QMC-CRYOIRF-004)**

**SMA Bulkhead male-female
(QMC-CRYOIRF-004MF)**

**SMP male-female
(QMC-CRYOIRF-004MF-SMP)**

**SMPM male-female
(QMC-CRYOIRF-004MF-MSMP)**

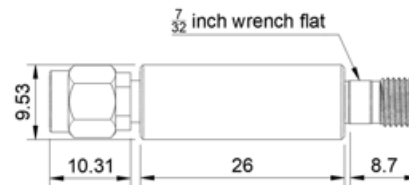
Drawings



QMC-CRYOIRF-004



QMC-CRYOIRF-004-S



QMC-CRYOIRF-004MF-S