



SMA Fixed Attenuator, DC-18 GHz, 2 Watts For Cryogenic Application

Rev 1

Features

- Cryogenic Operation to < 4 K
- Field-Proven in Quantum Computing
- Precision attenuation & Low VSWR up to 18GHz
- Non-Magnetic and Nickel-Free Plating to Avoid Magnetic Noise
- Stable Attenuation Over Temp with Laser Trimmed Resistive Element

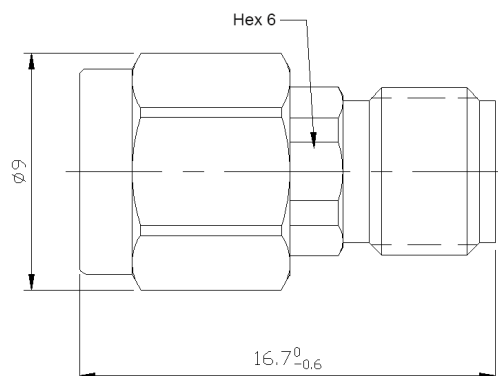
Electrical

Impedance	50 ohm				
Frequency Range	DC-18 GHz				
VSWR	1.25 max				
Input Avg Power	2W@ 25°C ambient, derating linearly to 0.2W at 100°C				
Peak Power	20W (5 micro-sec pulse width, 0.5% duty cycle)				
Attenuation(dB)	3	6	10	20	30
Accuracy(dB)	±0.6	±0.6	±0.6	±0.6	±0.6

Mechanical & Environmental

Connector Body	Gold plated beryllium copper
Center Contact	Gold plated beryllium copper for female and male contacts
Substrate	Aluminum nitride
Resistor Material	Thin Film
Net Weight	Approx 3g
Operating Temperature	4 K to +125°C

Dimensions(mm)



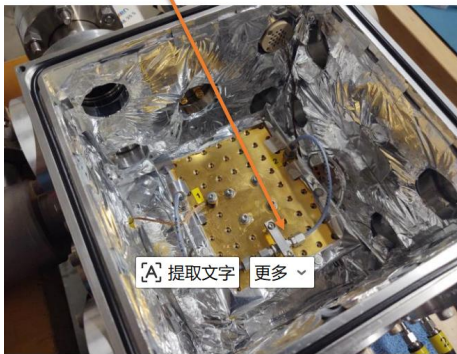


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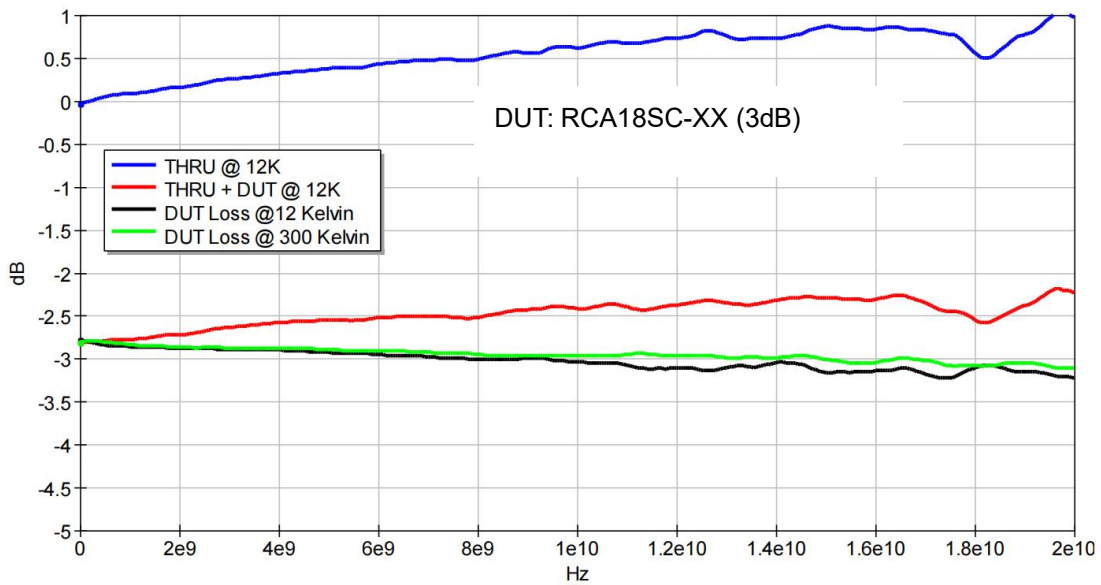
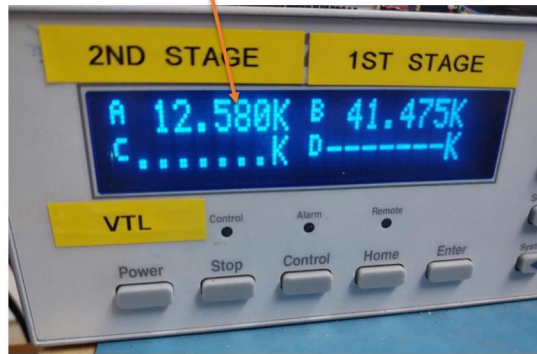
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Cryogenic Measurement

Device Under Test Inside Cryogenic Chamber



Measurement Temperature: 12.5 Kelvin



Model Description

RCA18SC-XX

1.Code for connector configuration: A=female for two ends; B=male for two ends; C=female for one end and male for the other.

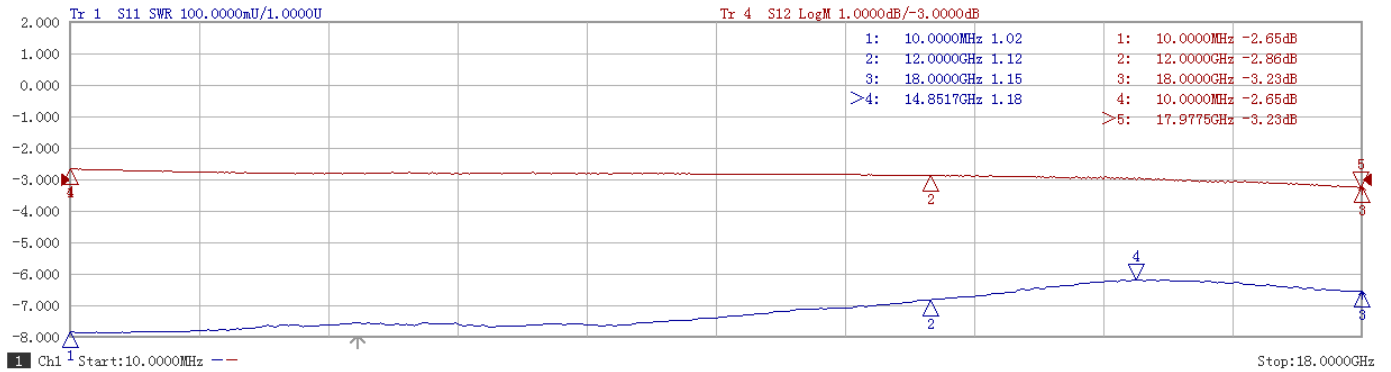
2.XX for dB value: 06=6dB,30=30dB

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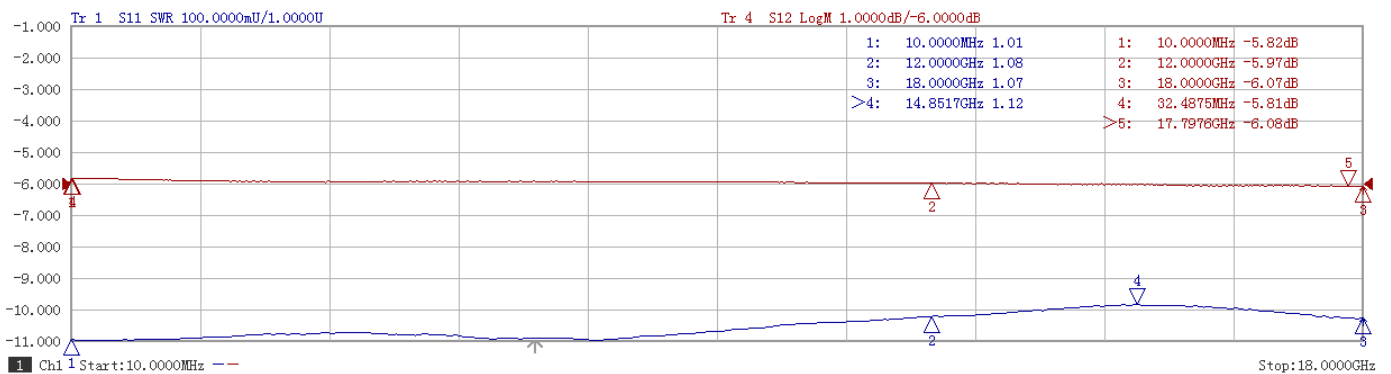


Typical Test Data

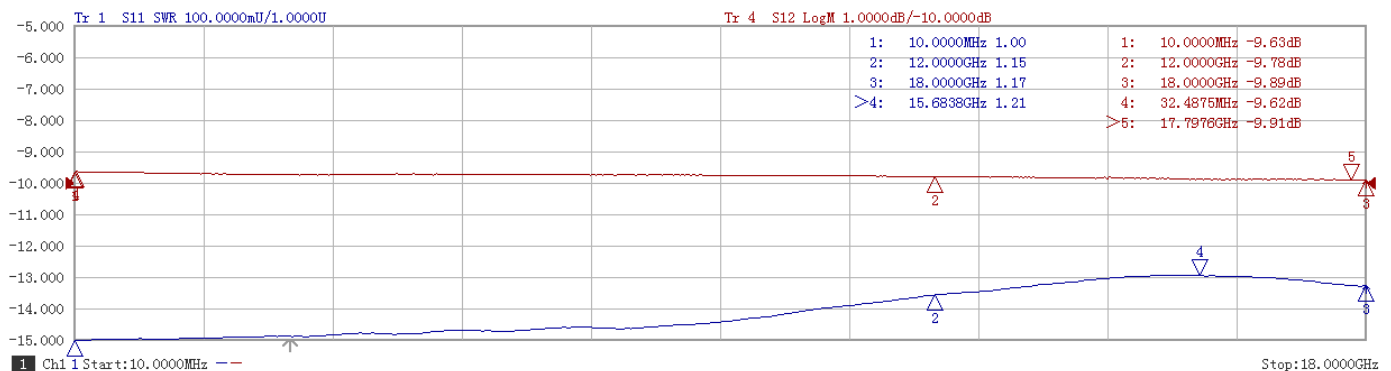
3dB



6dB



10dB





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Typical Test Data

20dB

