CAR18SC-XX

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

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

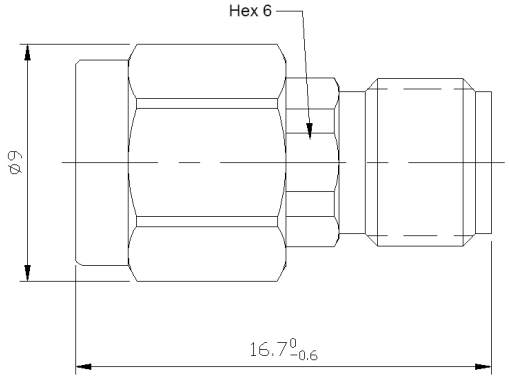
Impedance	50 ohm
Frequency Range	DC-18 GHz
VSWR	1.25 max
Input Avg Power	2W@ 25℃ ambient, derating linearly to 0.2W at 100℃
Peak Power	20W (5 micro-sec pulse width, 0.5% duty cycle)

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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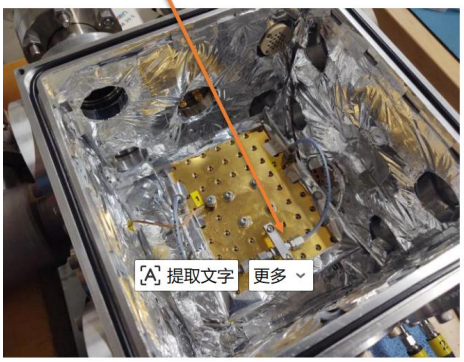
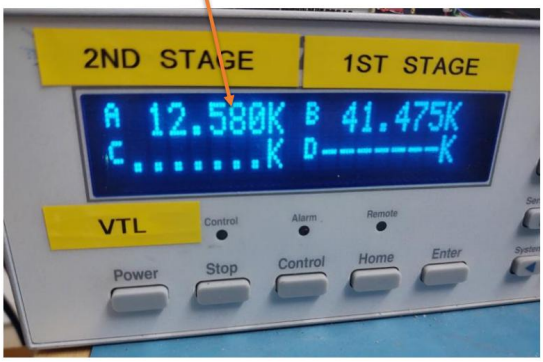
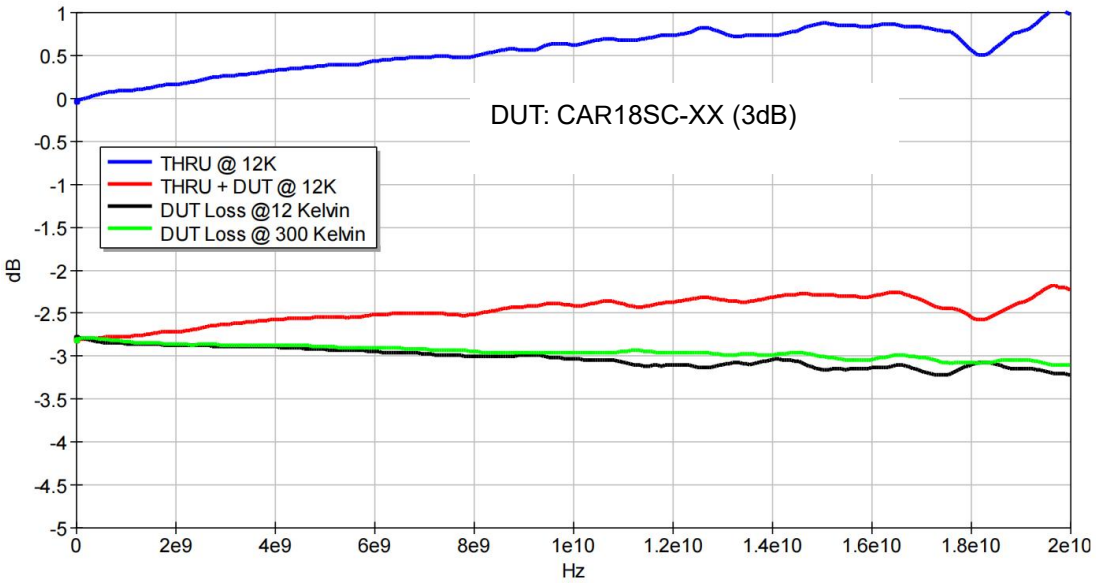
Cryogenic Measurement

Device Under Test Inside Cryogenic Chamber



Measurement Temperature: 12.5 Kelvin





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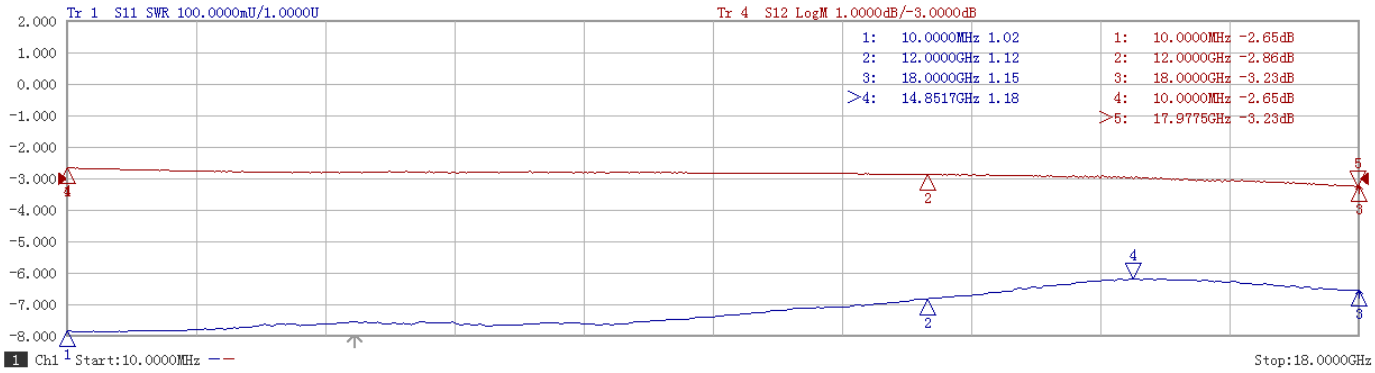
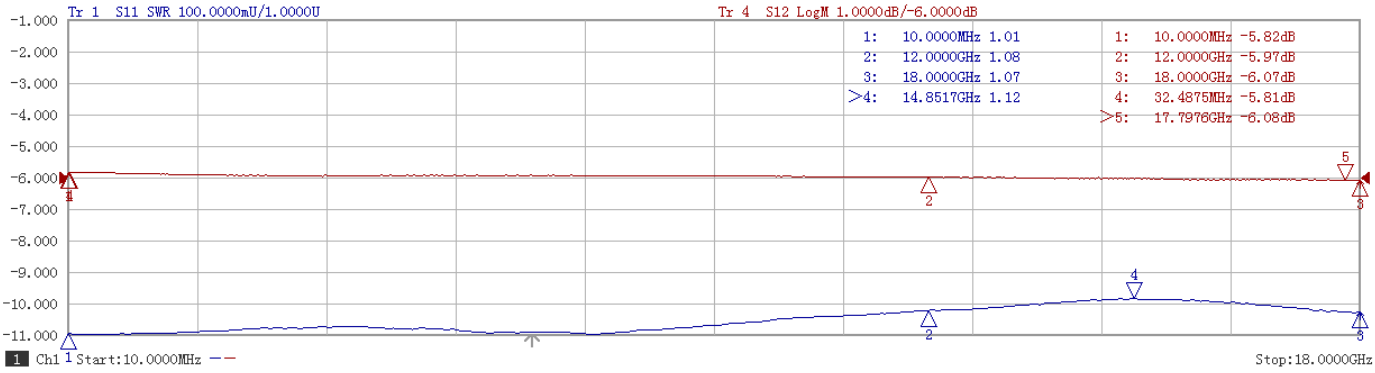
Typical Test Data

3dB



6dB



10dB

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Typical Test Data

20dB