

Rev:A00

## SMP-MF CR110 Infrared Filter



The CR110 infrared filter has a very low attenuation value, which helps protect sensitive quantum devices from the potential impact of high-energy photons that may cause unnecessary heating or decoherence.

### Technical requirements

Item	Specification
<b>Model</b>	FLTG00833A134
<b>Frequency range</b>	DC-8GHz
<b>Attenuation value</b>	≤4.5dB@6GHz (300K) ≤3.5dB@6GHz (77K)
<b>Return loss</b>	≥14dB@300K ≥17dB@77K
<b>Temperature</b>	10mK-300K
<b>Connector</b>	SMP-M & SMP-F

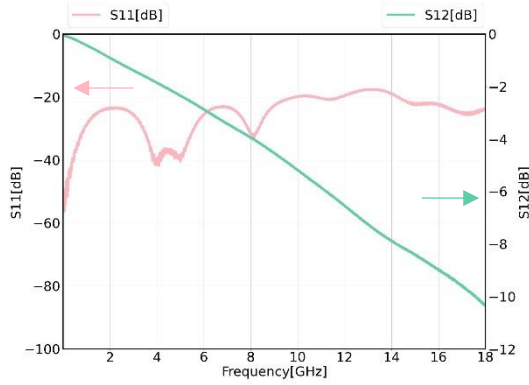
### Material and surface

	Item	Material	Surface
<b>SMP Connector</b>	<b>Outer connector</b>	Beryllium bronze	Non-magnetic gold plated
	<b>Center conductor</b>	Beryllium bronze	Non-magnetic gold plated
	<b>Connector-dielectric</b>	PTFE	/
	<b>Cavity</b>	Beryllium bronze	Non-magnetic gold plated
	<b>Center conductor</b>	Beryllium bronze	Non-magnetic gold plated
	<b>Dielectric</b>	PTFE	/

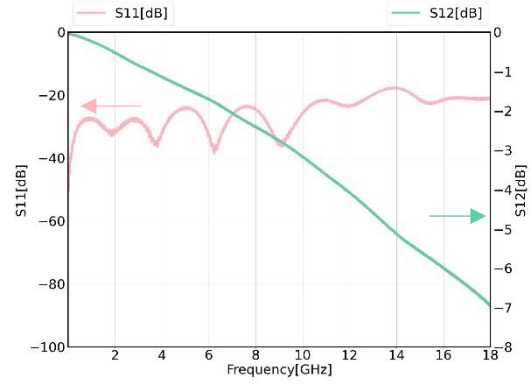
# SMP-MF CR110 Infrared Filter

## Test Results

Measure data,  $T_{amb}=300K$



Measure data,  $T_{amb}=77K$



## Outline drawing (Unmarked tolerance: $\pm 0.1mm$ )

