

Rev:A00

SMA-MF CR124 Infrared Filter



The CR124 infrared filter provides protection for sensitive quantum devices against the potential impact of high-energy photons that may cause unnecessary heating or decoherence. We offer infrared filters with different attenuation values.

Technical requirements

Item	Specifications
Model	See datasheet
Temperature	10mK-300K
Connector	SMA-M & SMA-F

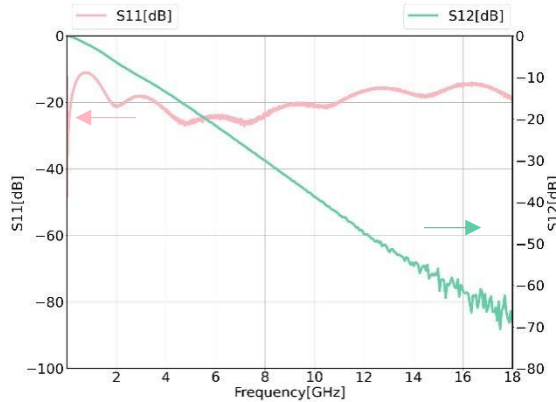
Material and surface

Item	Material	Surface
SMA Connector	Outer conductor	Beryllium bronze Non-magnetic gold plated
	Center conductor	Beryllium bronze Non-magnetic gold plated
	Connector-dielectric	PTFE /
Cavity	Oxygen-free copper Non-magnetic gold plated	
Center conductor	Beryllium bronze Non-magnetic gold plated	
Dielectric	PTFE /	

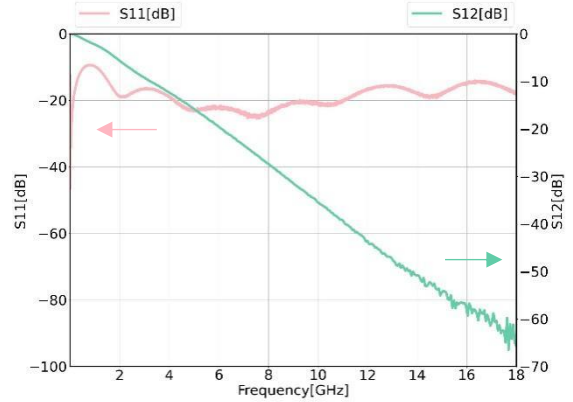
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Test Results (FLTG00811A016)

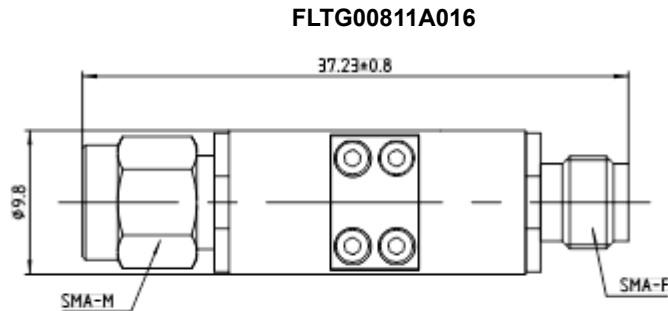
Measure data, T_{amb}=300K



Measure data, T_{amb}=77K



Outline drawing (Unmarked tolerance: ±0.1mm)



Datasheet

Model	Attenuation value	Return loss
FLTG00811A012	45±5dB@6GHz(77K)	≥ 15dB@4-8GHz(300K) ≥ 15dB@4-8GHz(77K)
FLTG00811A014	27±5dB@6GHz(77K)	≥ 15dB@4-8GHz(300K) ≥ 14dB@4-8GHz(77K)
FLTG00811A016	20±5dB@6GHz(77K)	≥ 17dB@4-8GHz(300K) ≥ 16dB@4-8GHz(77K)
FLTG00811A024	36±5dB@6GHz(77K)	≥ 15dB@4-8GHz(300K) ≥ 14dB@4-8GHz(77K)