

# Rev:A00

# SMA-MF XHz Low-pass Filter



The low-pass filter allows low-frequency signals to pass through normally, while high-frequency signals exceeding a certain threshold are blocked or attenuated. However, the degree of blocking or attenuation may vary depending on the frequency and the specific filtering program (objective). For different filters, the attenuation level of each frequency signal varies.

#### **Technical requirements**

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

#### Material and surface

|                  | Item                 | Material           | Surface                  |
|------------------|----------------------|--------------------|--------------------------|
| SMA<br>Connector | Outer conductor      | Beryllium bronze   | Non-magnetic gold plated |
|                  | Center conductor     | Beryllium bronze   | Non-magnetic gold plated |
|                  | Connector-dielectric | PTFE               | 1                        |
|                  | Cavity               | Oxygen-free copper | Non-magnetic gold plated |

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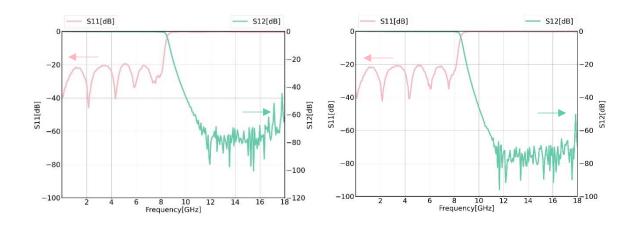




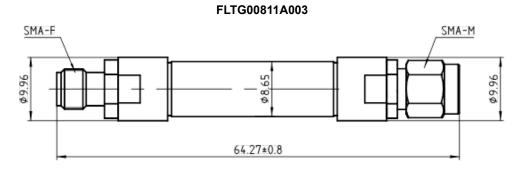
## Test Results (FLTG00811A003)

Measure data, Tamb=300K

Measure data, Tamb=77K



## Outline drawing (Unmarked tolerance: ±0.1mm)



#### Datasheet

| Model         | Connector | Frequency<br>range | Insert loss<br>(300K &<br>77K) | Return loss<br>(300K &<br>77K) | Out-of-band rejection<br>(300K & 77K)           |
|---------------|-----------|--------------------|--------------------------------|--------------------------------|---|
| FLTM01011A047 | SMA-M/F   | DC-10MHz           | ≤0.8dB                         | ≥20dB                          | ≥40dB@0.04-5GHz                                 |
| FLTM08011A085 | SMA-M/F   | DC-80MHz           | ≤1dB                           | ≥16dB                          | ≥25dB@0.2-2GHz                                  |
| FLTM50011A046 | SMA-M/F   | DC-500MHz          | ≤0.8dB                         | ≥20dB                          | ≥40dB@1.5-3GHz                                  |
| FLTG00111A043 | SMA-M/F   | DC-1GHz            | ≤1dB                           | ≥20dB                          | ≥25dB@1.6-5.5GHz(300K)<br>≥20dB@1.6-5.5GHz(77K) |
| FLTG00611A084 | SMA-M/F   | DC-6GHz            | ≤1dB                           | ≥20dB                          | ≥40dB@8-24GHz                                   |
| FLTG00811A003 | SMA-M/F   | DC-8GHz            | ≤1dB                           | ≥18dB                          | ≥30dB@10-16GHz                                  |

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