BASEL CRYOGENICS

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Microwave Filter and Thermalizer

Typical room temperature transmission characteristics:

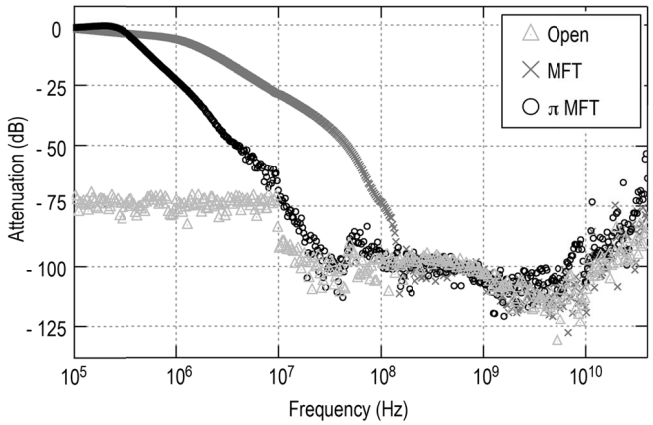
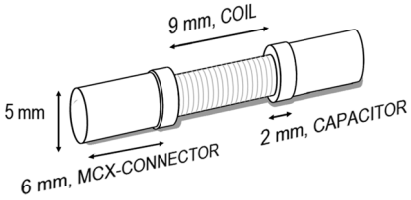
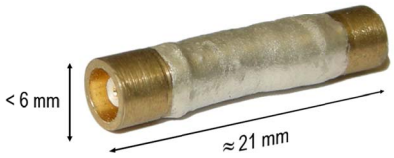


Figure adapted from Appl. Phys. Lett. 104, 211106 (2014)

πMFT schematics and dimensions:

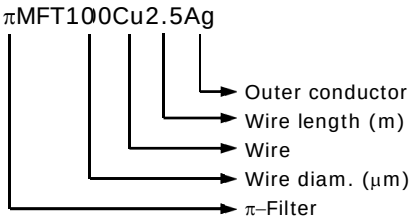


MFT picture:



Technical Data:

	MFT100Cu2.5Ag	πMFT100Cu2.5Ag
DC-Resistance RT	≈ 5 Ω	≈ 5 Ω
DC-Resistance (T=4.2 K)	≈ 40 mΩ	≈ 40 mΩ
Capacitance RT	≈ 4 nF	≈ 14 nF
Capacitance (T=4.2 K)	≈ 4 nF	≈ 14 nF
25 dB Atten. typical RT	≥ 8 MHz	≥ 1 MHz
100 dB Atten. typical RT	≥ 150 MHz	≥ 30 MHz
>75 dB Atten. guarant. RT	0.2 GHz ≤ f ≤ 10 GHz	30 MHz ≤ f ≤ 10 GHz
Connector type	MCX	MCX



The attenuation shown is approximate, measured at room temperature (RT). Slight variations occur from filter to filter and upon cool down to 4K or below. Adding a series resistance prior to the MFT may increase the overall attenuation. The MFTs are fragile; handle with care, particularly when plugging-in/unplugging. Over hundred MFTs are in use in our lab so far without any failures after numerous thermal cycles. The MCX connectors used are not magnetic or only very weakly magnetic. We test each filter individually for shorts and opens and can provide an attenuation spectrum up to 10 GHz for each individual filter.

Pricing information:

MFT100Cu2.5Ag	800 EUR	
πMFT100Cu2.5Ag	1'000 EUR	VAT 8 % in Switzerland

Two years of warranty. We guarantee MFTs without shorts or opens.
Delivery time: ca. 4 weeks after receipt of PO.
Discount: 15% for 5 to 9 filters, 25% for 10 or more filters
Customized variants may be possible at an extra charge with longer lead time (e.g. other connector or wire type)