10 MHZ BAND-PASS MONOLITHIC CRYSTAL FILTER

With 50-Ohm Ports

SPECIFICATIONS

- 50 Ohm in/out ports
- Bandwidth of 1 kHZ (+/- 500 HZ) @ -3 dB
- Bandwidth of 1.2 kHZ (+/- 600 HZ) @ -20 dB
- Bandwidth of 10 kHZ (+/- 5 kHZ) @ -60 dB
- Pass-band ripple 0.5 dB
- Insertion loss: 3 dB max
- Power input range: -80...+5 dBm
- Operating temperature: -40...+85 C
- Dimensions: 30x20x10 mm

Webpage:
https://www.sv1afn.com/en/product-category-4/10-mhz-crystal-filter-1-1.html

SV1AFN.COM

16 Ag. Georgiou
Anavyssos 19013
Greece
VAT no. EL 042237030
Chamber Reg. No 171467
Hellenic Business Registry reg. number: 060488603000
DUNS number: 524163138

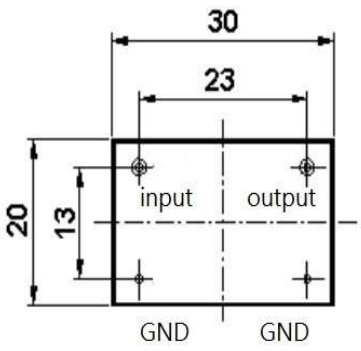
DESCRIPTION

This narrow 10 MHZ band-pass filter (-3dB bandwidth of 1 KHZ) can be used mainly for a lab's reference frequency signal clean-up. It greatly improves phase noise. It can also be used to filter out harmonics of square wave oscillators and generators for converting their waveform to sine, for isolation improvement, even for selecting the 10 MHZ time signals in receiver front ends or IF circuits. Placing two of them in series, it can further narrow the bandwidth.

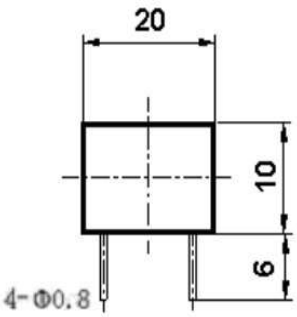
USAGE

It is connected between a 10 MHZ signal source and a distribution amplifier or directly between a 10 MHZ signal source and a device accepting the reference signal. As its insertion loss is small, nothing else would be needed. As it is a passive device, no DC power or anything else is required.

MECHANICAL DIMENSIONS (MM)

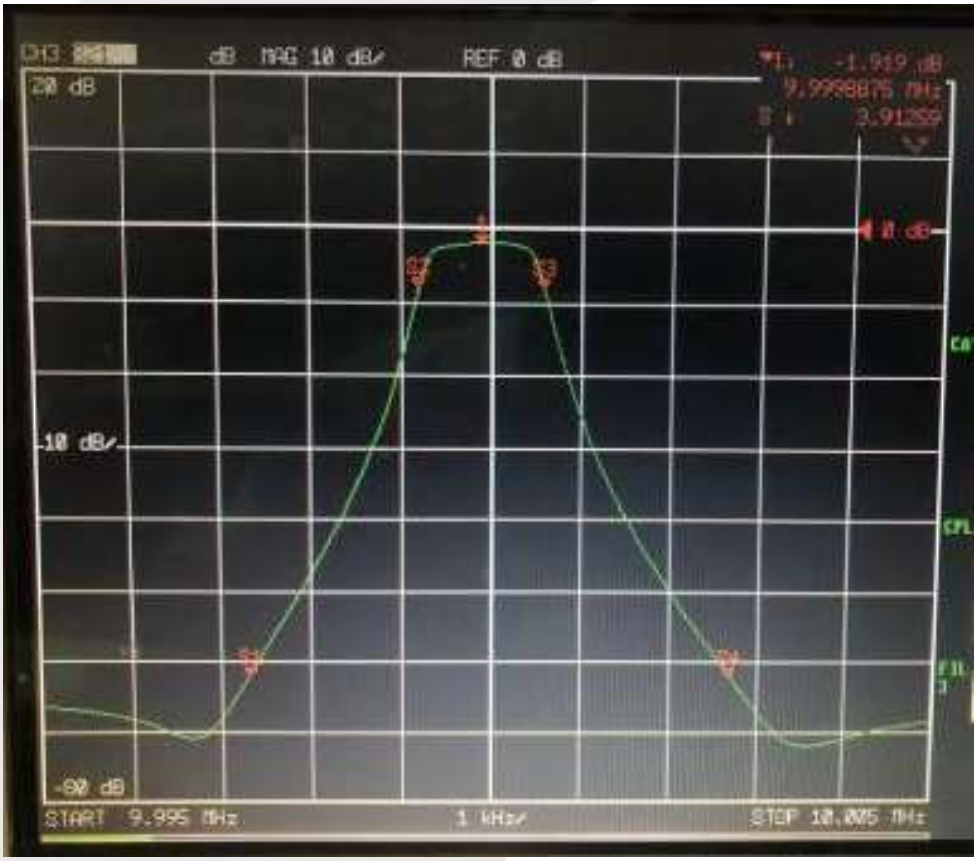


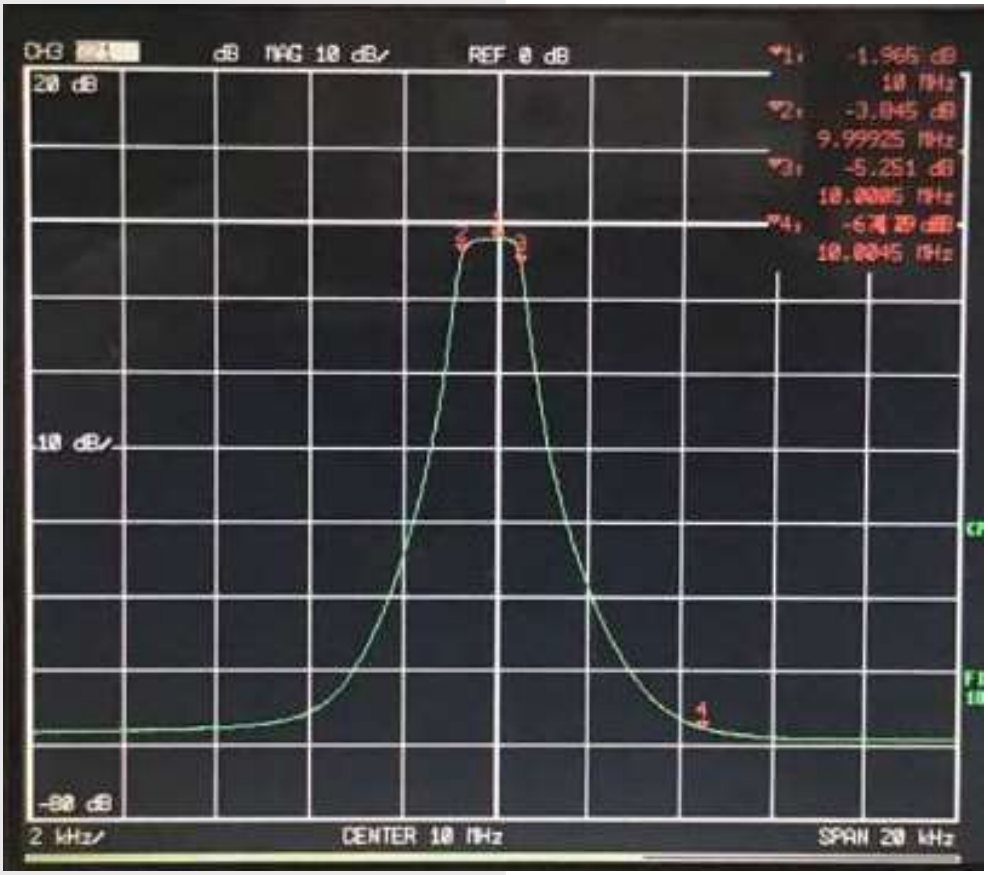
(bottom view)



(side view)

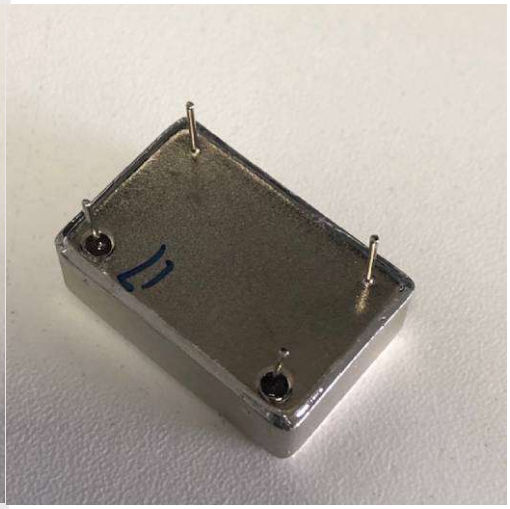
VNA PLOTS


dB MAG 10 dB/
REF 0 dB
20 dB
-10 dB/
START 9.995 MHz
1 kHz/
STOP 10.005 MHz

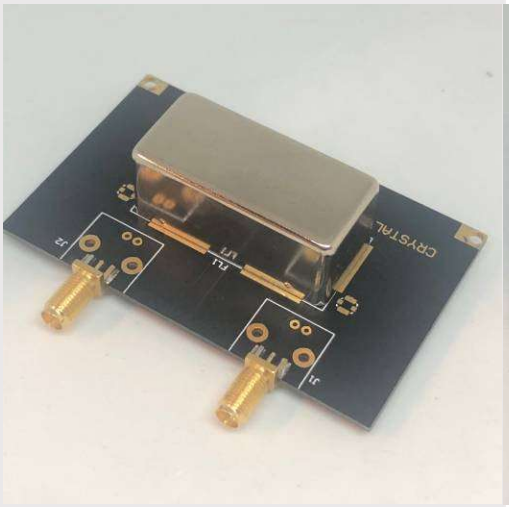
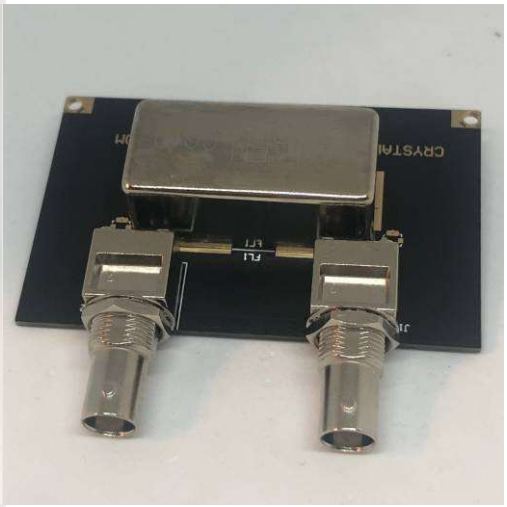

dB MAG 10 dB/
REF 0 dB
20 dB
-10 dB/
2 kHz/
CENTER 10 MHz
SPAN 20 kHz

AVAILABLE CONFIGURATIONS:

Crystal filter parts:
https://www.sv1afn.com/en/product-category-4/10-mhz-crystal-filter-1-3.html

Crystal Filter on a PCB Module:
https://www.sv1afn.com/en/product-category-4/10-mhz-crystal-filter-1.html

Crystal Filter encased:
https://www.sv1afn.com/en/product-category-4/10-mhz-crystal-filter-1-1.html