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Tunable Bandpass Cavity Filters

MtronPTI Part#: UF9978

Using over 50 years of high performance RF filter design and manufacturing experience, MtronPTI can provide field tunable bandpass cavity filters that could be used to tune desired signals while rejecting interfering signals in Air Navigation Systems Receivers.

Features: High Q, Low Insertion Loss, Better Selectivity, Power Handling, Excellent out of band performance

Applications: TACAN/DME Air Navigation Systems, Instrumentation

General & Electrical Requirements:

1. Passband Frequency Range: 1025 to 1150MHz min

Passband: $F_c \pm 0.2\text{MHz}$ minimum

Passband Variation: 0.25dB maximum

Passband Return loss: 14dB maximum

3dB Bandwidth: 4MHz maximum

Insertion Loss @ tuned frequency: 2.0dB maximum, 1.5dB typical

Stop-Band Attenuation:

80dB minimum from 5MHz to $F_c - 63\text{MHz}$

80dB minimum from $F_c + 63\text{MHz}$ to 2800MHz

Input Power: 50W average maximum

Out of band signals ($\pm 63\text{MHz}$ from F_c): 1000W peak (4uSec Pulse width, 5% duty maximum.)

Tuning Method: Screw Tuning

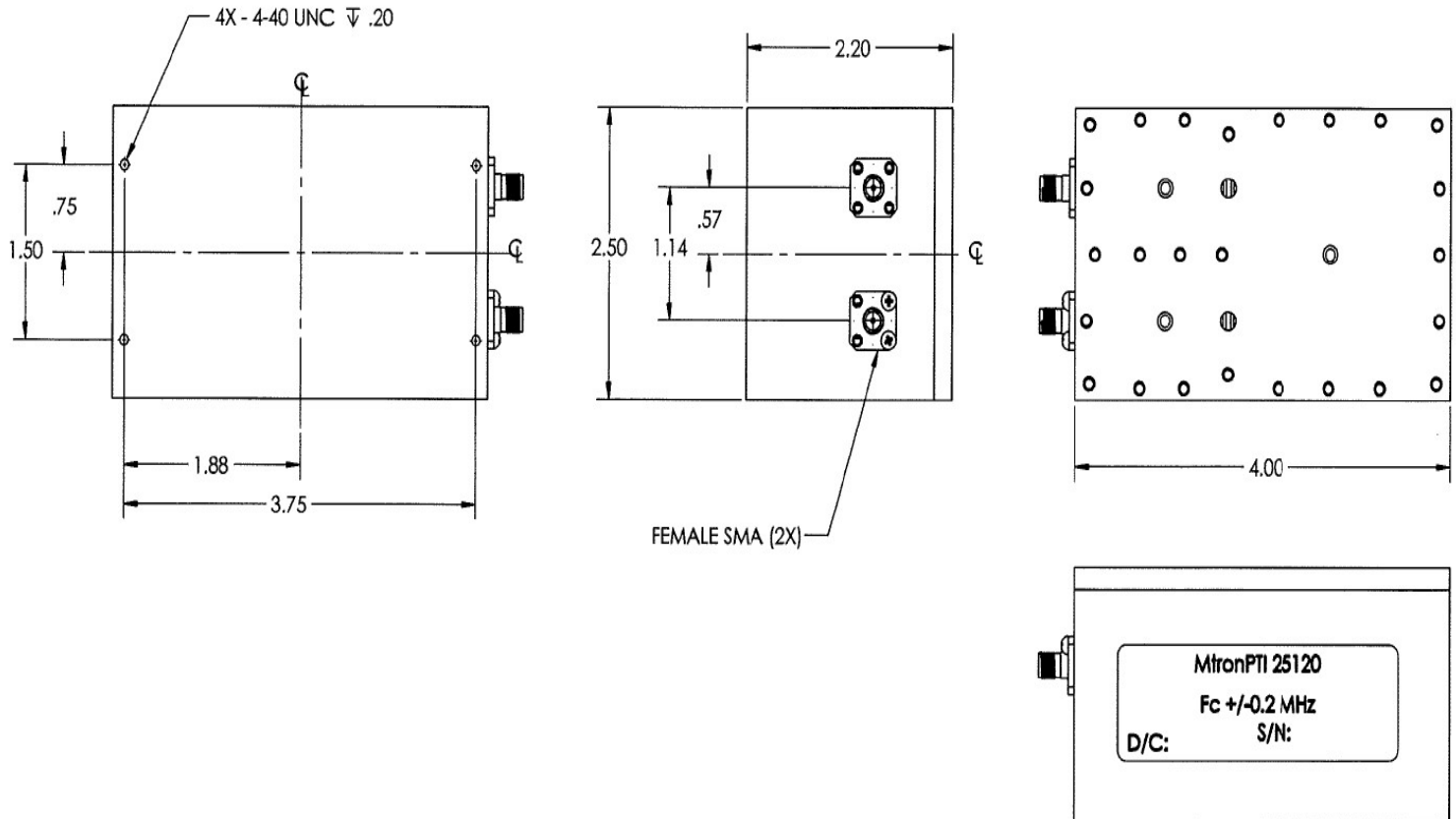
RF Impedance: 50 ohms

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2. General Specifications:

Operating Temperature: -20°C to +60°C

Connector: SMA Female



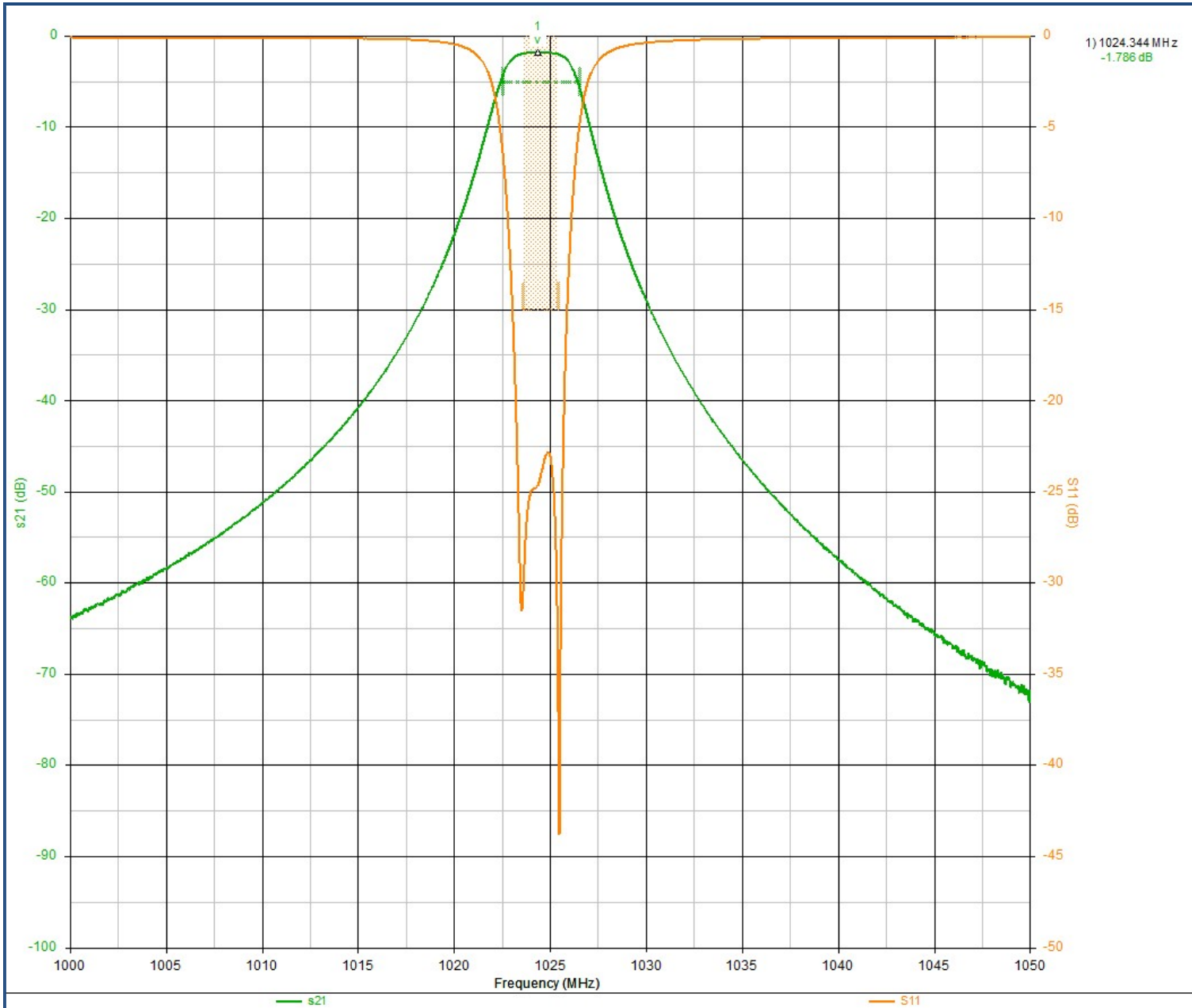
UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES
DECIMALS ANGULAR
XX ± .01 ±
.XXX ± .005
DO NOT SCALE DRAWING



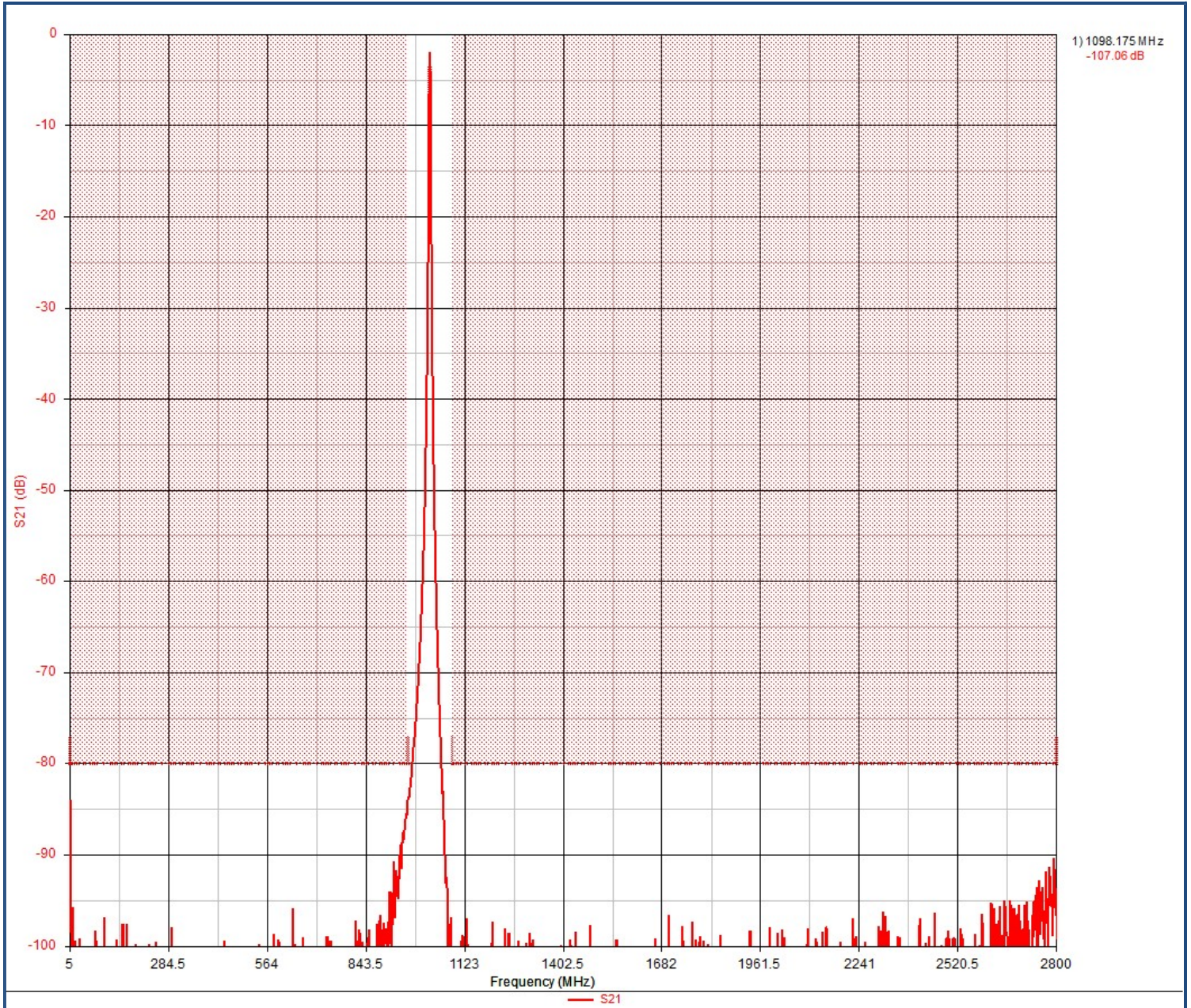
Paint: Black with Mil-DTL 64159 Type 2 Waterborne Polyurethane

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II. Test Data



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Data Sheet Revision Table

Date	Rev.	Author	Details of Revision
11-05-18	A	DPD	Original Release