

# SPECIFICATION

ITEM: CRYSTAL BANDPASS FILTER  
 PART NUMBER: FN-1948W

11/29/2021 – Revised operating temperature

ISSUED / REVISION	ENGINEER APPROVED	DOCUMENT CHECKED	DRAFTSMAN
8/5/2021 <sup>(PG)</sup>			
11/29/2022 <sup>(ASM)</sup>	11/29/2022 <sup>(TG)</sup>		

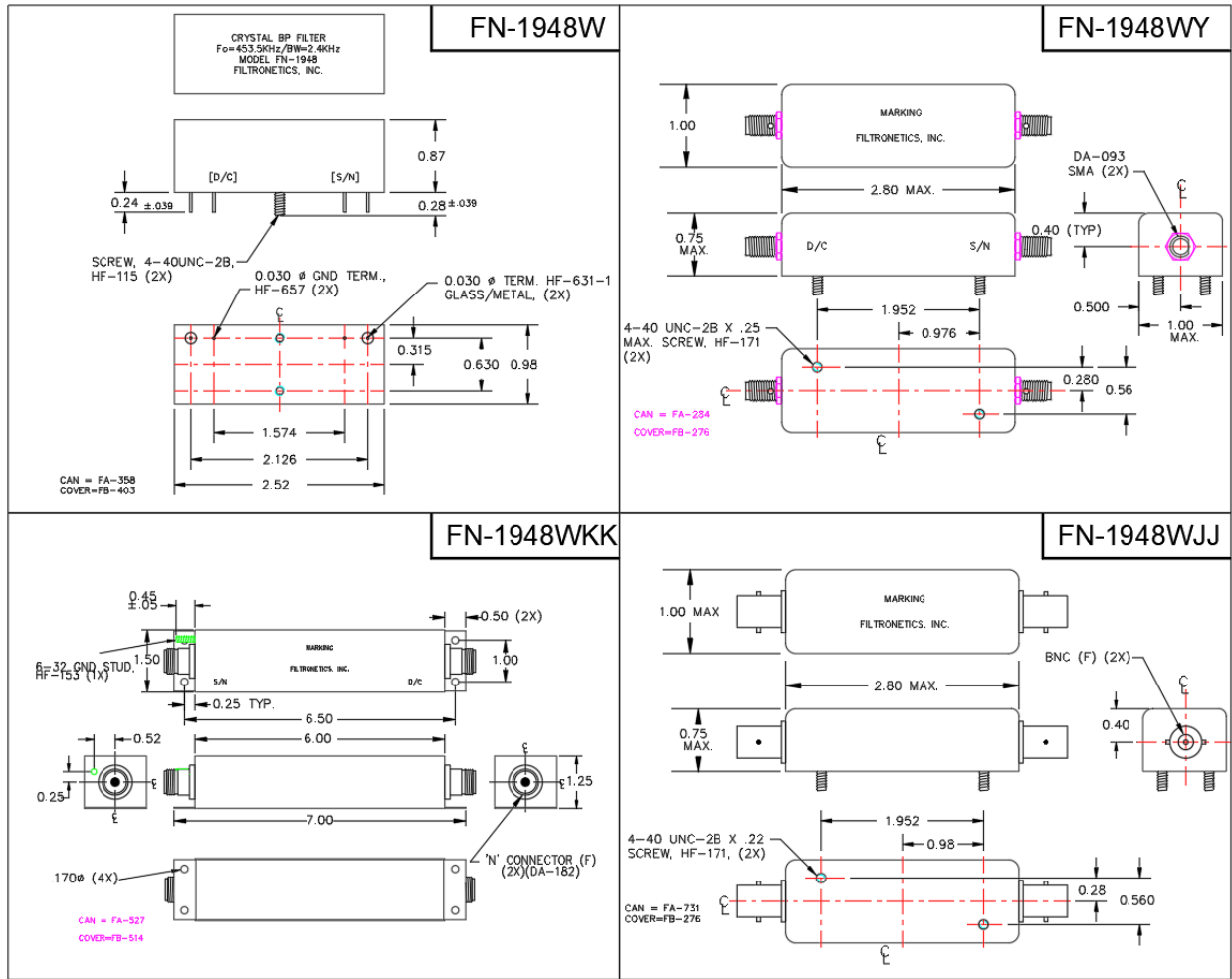
**FILTRONETICS Inc**

1. Part Number: FN-1948W

2. Electrical Specifications:

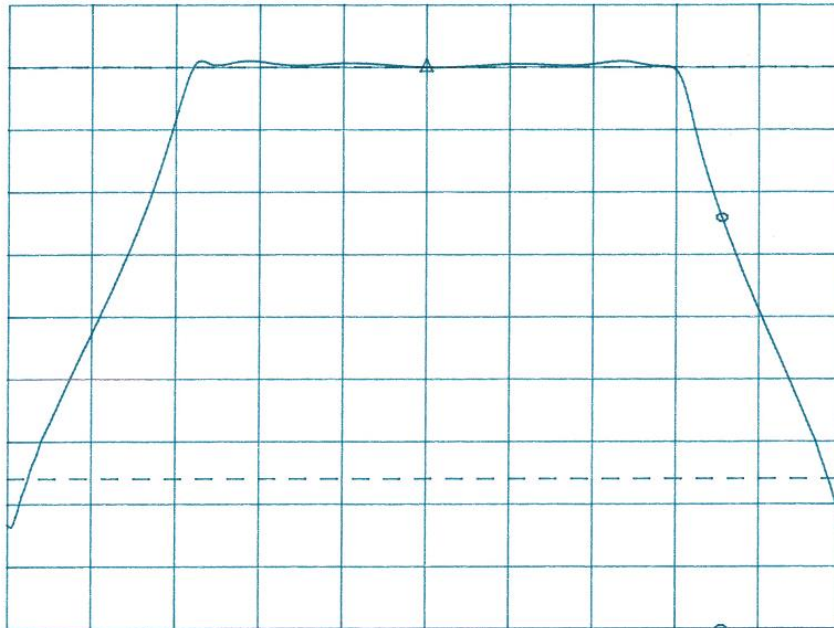
Filter Type	Band Pass
Center Frequency (Fo)	453.5 kHz
6 dB Band Width:	±1.2 kHz Min
Insertion Loss:	6 dB Max
Pass Band Ripple:	3 dB Max
46 dB Band Width:	±1.9 kHz Max
66 dB Band Width:	±2.1 kHz Max
20 dB Band Width:	Frequencies above 455 kHz
Ultimate Attenuation	60 dB Min
Impedance:	4.7 kΩ / 70 pF
Input Power:	15 dBm Max
Operating Temperature:	-10°C to +50°C
Extended Operating Temperature:	-30°C to +60°C with degradation
Workmanship:	J-STD-001
RoHS Compliant:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

3. Mechanical Package Styles:



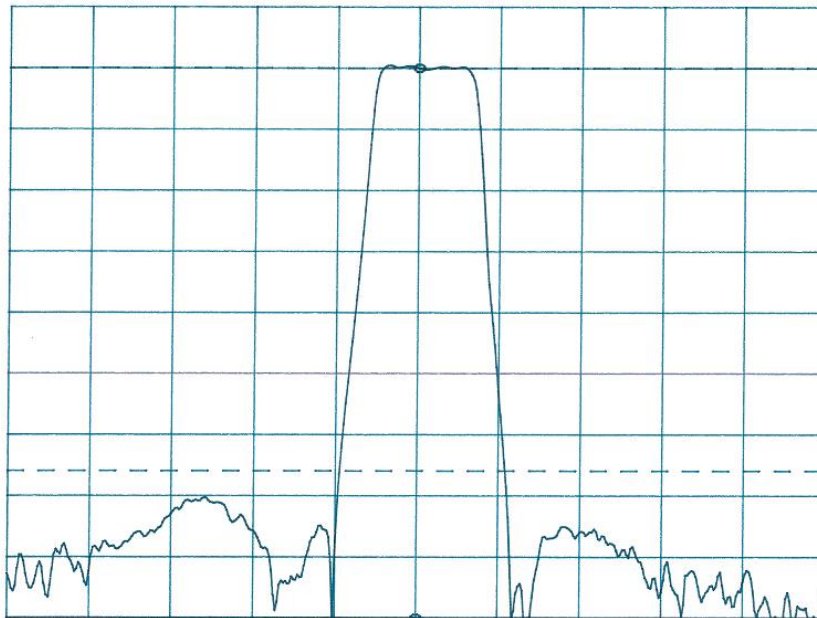
4. Response Plots:

REF LEVEL	/DIV	OFFSET 1	491.000Hz
-8.820dBm	10.000dB	MAG (UDF)	-24.001dB
0.000dBm	0.010dB	MARKER 454	991.000Hz
		MAG (UDF)	-32.833dBm



CENTER 453 500.000Hz SPAN 4 200.000Hz  
AMPTD 15.0dBm

REF LEVEL	/DIV	MARKER 453	500.000Hz
-8.820dBm	10.000dB	MAG (UDF)	-8.795dBm
0.000dBm	0.010dB	MARKER 453	500.000Hz
		MAG (UDF)	-8.795dBm



CENTER 453 500.000Hz SPAN 20 000.000Hz  
AMPTD 15.0dBm