TMX W312

SAW Filter datasheet

2.5 x 2.0 x 1.0 mm, SMD

Table of Contents

Issue: Rev 5, 29 November 2022

TMX W312

SAW Bandpass Filters | GPS Filter

Features

Features

- 1575.42 MHz Center frequency
- Ceramic package for Surface Mounted Technology
- 50 Ω Single Configuration
- 2.4 MHz useable Passband

Applications

- GPS Filter

2.5 x 2.0 x 1.0 mm

Maximum Ratings

Parameter	Min.	Typ.	Max.	Unit
Storage temperature range (T_{stg})	-40		85	°C
Operating temperature range (T_A)	-40		85	°C
DC voltage between any two pins			5	V
Input Power Level			10	dBm

Frequency and Electrical Characteristics (Reference temperature @ 25°C)

Parameter	Min.	Typ.[1]	Max.	Unit
Source impedance[2] (Single ended)		50		Ω
Load impedance[2] (Single ended)		50		Ω
Center frequency (fc)		1575.42		MHz
Bandwidth @ -3 dB (BW, passband width)	2.40			MHz
Absolute Attentuation				
From DC to 1400 MHz	35	37		dB
From 1400 to 1475 MHz	30	34		
From 1475 to 1525 MHz	25	37		
From 1625 to 1640 MHz	30	45		
From 1640 to 2000 MHz	32	34		
From 2000 to 3000 MHz	32	34		
Insertion Loss (IL, 1574.22 – 1576.62 MHz)		1.5	2.2	dB
VSWR (1574.22 – 1576.62 MHz)		1.2	2.0	
Amplitude ripple[3] (1574.22 – 1576.62 MHz)		0.1	1.0	dB

[1] Typical values are nominal performances at room temperature

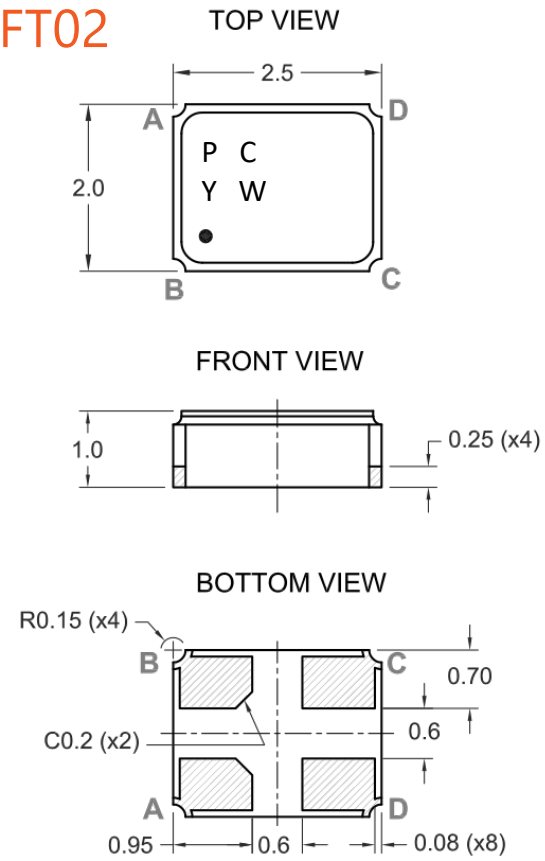
[2] No external matching network is required

[3] The amplitude variation is defined as the maximum level – minimum level over the given bandwidth

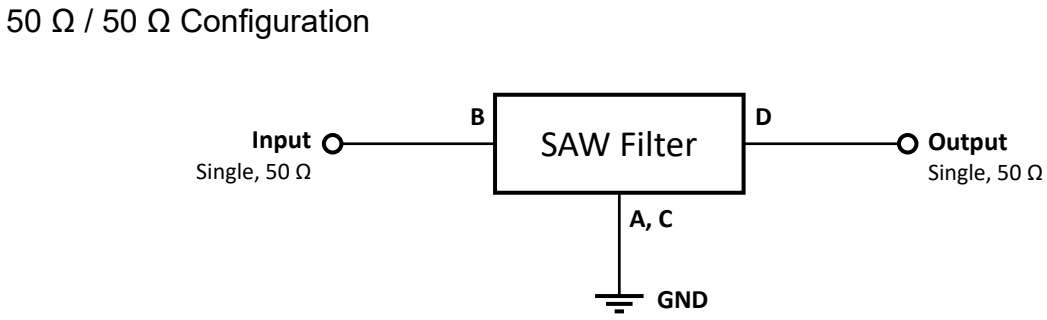
Model Outline, Pin Connection and Marking

FT02

2.5x2.0x1.0mm (x3)
W312

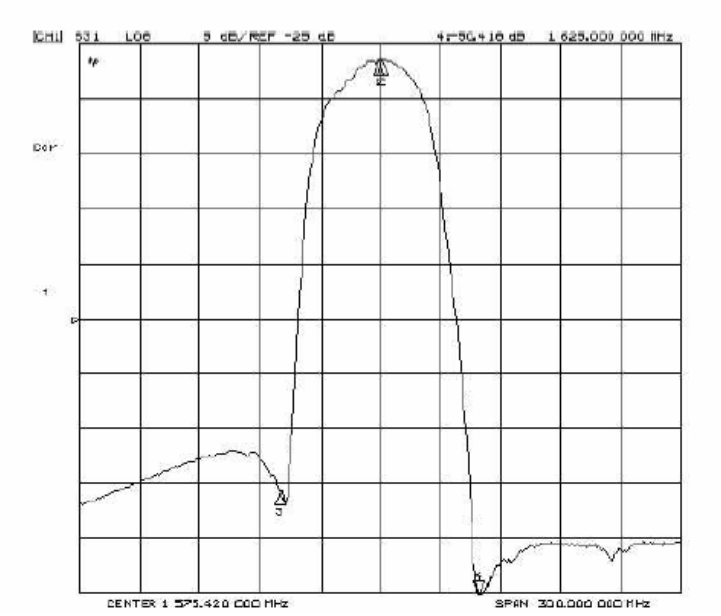


Test Circuit



Frequency Characteristics

FREQUENCY RESPONSE



FREQUENCY RESPONSE