

TMX W311

SAW Filter datasheet

2.5 x 2.0 mm, SMD

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TMX W311

SAW Bandpass Filters | Wireless Communications



Features

Features

- 1960 MHz center frequency
- Ceramic package for Surface Mounted Technology
- 60 MHz useable Passband
- 50 Ω Single Input / 200 Ω Balanced Output

Applications

- Wireless applications
 - o RF filter for PCS1900 Rx



2.5 x 2.0 mm

Maximum Ratings

Parameter	Min.	Тур.	Max.	Unit
Storage temperature range (T _{stg})	-25		75	°C
Operating temperature range (T _A)	-40		85	°C

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

Parameter	Min.	Typ. ¹	Max.	Unit		
Source impedance ² (Single ended)		50		Ω		
Load impedance ² (Balance drive)		200		Ω		
Center frequency (fc)		1960		MHz		
Bandwidth @ -3 dB (BW, passband width)	60.00			MHz		
Absolute Attenuation						
From DC to 1000 MHz	45	55		dB		
From 1000 to 1830 MHz	25	31		dB		
From 1830 to 1900 MHz	15	25		dB		
From 1900 to 1910 MHz	7	13		dB		
From 2010 to 2030 MHz	5	8		dB		
From 2030 to 2070 MHz	12	18		dB		
From 2070 to 2310 MHz	20	24		dB		
From 2310 to 2380 MHz	35	38		dB		
From 2380 to 4600 MHz	30	39		dB		
From 4600 to 6000 MHz	23	54		dB		
Insertion Loss (IL, 1930 – 1990 MHz)		2.7	4.0	dB		
Input VSWR (1930 – 1990 MHz)		1.8	2.4			
Output VSWR (1930 – 1990 MHz)		2.0	2.4			
Amplitude ripple (1930 – 1990 MHz)		0.6	2.4	dB		
Symmetry in band (referenced to the matched operating condition						
S31 / S21 : 1930 – 1990 MHz)	-2.0	0	1.5	dB		
(S31) – (S21): 1930 – 1990 MHz	-15	0	15	۰		

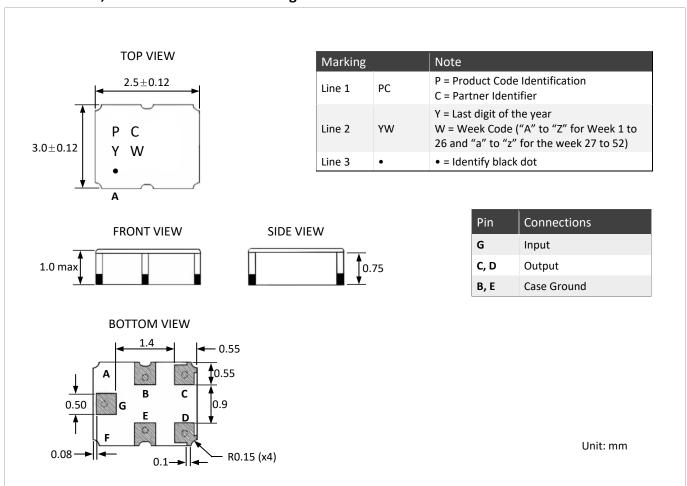
Issue: Rev 3, 9 January 2023

¹ Typical values are nominal performances at room temperature

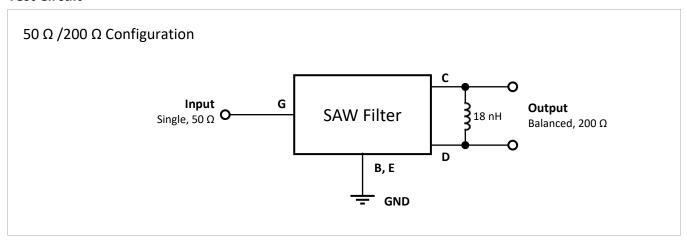
² External matching network is required



Model Outline, Pin Connection and Marking



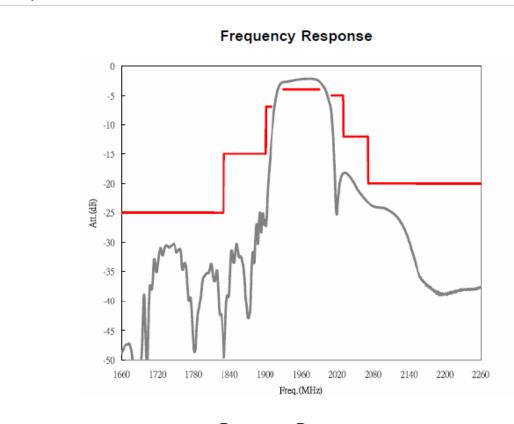
Test Circuit



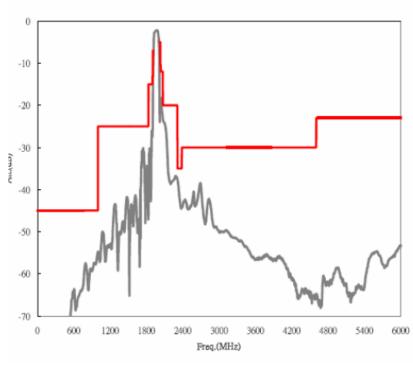
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Frequency Characteristics



Frequency Response



TMX W311





Packaging

