

TMX W353

SAW Filter datasheet

3.0 x 3.0 mm, SMD

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SAW Bandpass Filters | Bluetooth

Features

Features

- 2441.8 MHz center frequency
- Ceramic package for Surface Mounted Technology
- 83.5 MHz useable Passband
- 50Ω Single Configuration
- RF Saw Filter for Bluetooth

Applications

- Bluetooth

3.0 x 3.0 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 (V_{DC})			0	V
Input Power			10	dBm

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

Parameter	Min.	Typ. ¹	Max.	Unit
Source impedance (Single ended)		50		Ω
Load impedance (Single ended)		50		Ω
Center frequency (f_c)		2441.8		MHz
Bandwidth @ -3 dB (BW, passband width)	83.50			MHz
Absolute Attenuation				dB
From 10 to 1700 MHz	20	29		
From 1700 to 2200 MHz	25	30		
From 2700 to 3100 MHz	30	40		
From 3100 to 4000 MHz	20	29		
From 4000 to 5000 MHz	10	20		
Insertion Loss (IL, 2400 – 2483.5 MHz)		2.1	5.0	dB
Amplitude ripple (2400 – 2483.5 MHz)		0.9	3.0	dB
Input/Output VSWR (2400 – 2483.5 MHz)		1.7	2.6	

¹ Typical values are nominal performances at room temperature

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Model Outline, Pin Connection and Marking

TOP VIEW

Dimensions: 3.0 ± 0.1 SQ (height), 1.0 max (thickness), 1.4 max (total height)

Pin locations: A, B, C, D, E, F

Marking: W353, YWWZZ, • A

Marking	Note
Line 1	NNNN Reference to RakonXpress part number with only the last 4 digits
Line 2	RYWWZZ R = Partner identifier Y = Last digit of the year WW = Number of week in the year ZZ = Lot number in the week (from AA to ZZ)
Line 3	• • = Identify black dot

FRONT VIEW: 1.0 max (thickness), 1.4 max (total height)

SIDE VIEW: Shows the profile of the filter and pins.

Pin	Connections
B	Input
E	Output
A, C, D, F	Case Ground

BOTTOM VIEW: Dimensions include 2.8 (width), 0.6 (pad width), 1.5 (height), 1.3 (height), 0.85 (height), and 1.6 (width).

Pin locations: A, B, C, D, E, F

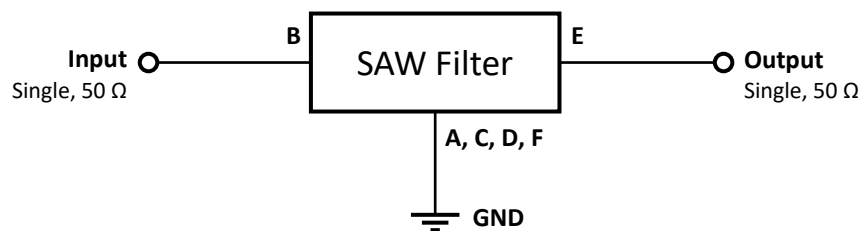
RECOMMENDED PAD LAYOUT

TOP VIEW: Dimensions include 3.2 (width), 1.7 (height), 1.05 (height), 1.1 (height), 0.3 (width), and 0.9 (width).

Unit: mm

Test Circuit

50 Ω / 50 Ω Configuration



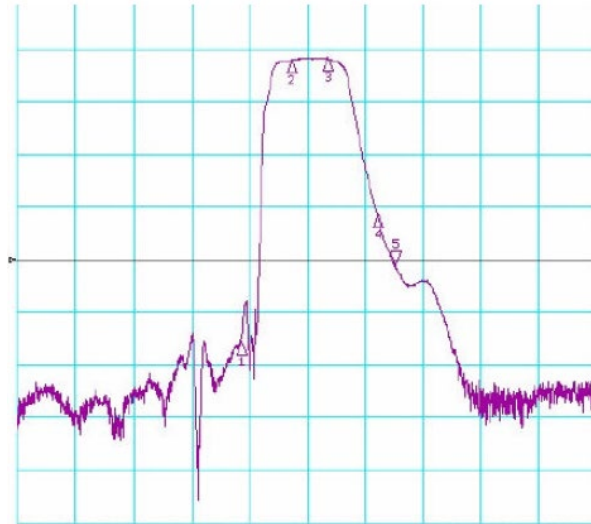
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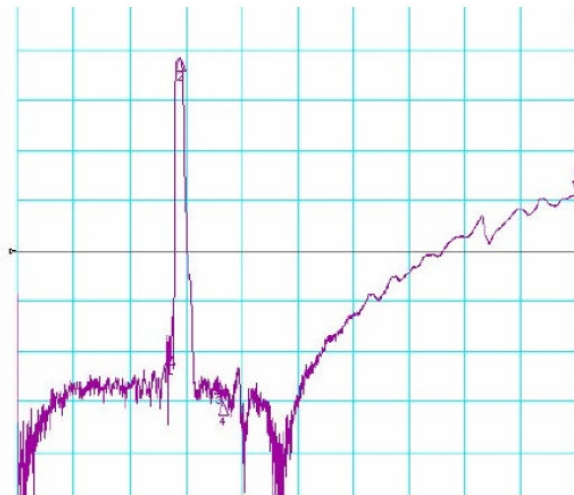


Frequency Characteristics

Frequency Response



Frequency Response



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Packaging

REEL DETAILS:

