

## TMX U393

### SAW Filter datasheet

3.8 x 3.8 x 1.5 mm, SMD

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# TMX U393

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## Features

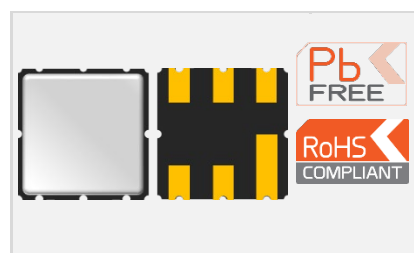
### Features

- 915 MHz center frequency
- Ceramic package for Surface Mounted Technology
- Low Insertion loss (typically 2.5dB) within PassBand 902 to 928 MHz
- Input Power: 15dBm
- No matching network required for operation at 50Ω

### Applications

- Remote control - RF
- Wireless applications

3.8 x 3.8 x 1.5 mm



## Maximum ratings

Parameter	Min.	Typ.	Max.	Unit
Storage temperature range ( $T_{stg}$ )	-45		85	°C
Operating temperature range ( $T_A$ )	0		70	°C
Input Power			15	dBm

## Frequency and electrical characteristics (Reference temperature @ 25°C)

Parameter	Min.	Typ. <sup>1</sup>	Max.	Unit
Center frequency ( $f_c$ )		915		MHz
Bandwidth (BW, passband width)	26.00			MHz
Insertion Loss (IL, 902 – 928 MHz)		2.5	3.3	dB
Amplitude ripple (902 – 928 MHz)		0.5	1.5	dB
Absolute Attenuation				
From 100.0 to 800.0 MHz	50	60		dB
From 800.0 to 845.0 MHz	45	50		
From 845.0 to 880.0 MHz	35	40		
From 947.0 to 992.0 MHz	15	20		
From 992.0 to 1020.0 MHz	35	40		
From 1020.0 to 1200.0 MHz	45	50		
Source impedance <sup>2</sup> (Single ended)		50		Ω
Load impedance <sup>2</sup> (Single ended)		50		Ω

<sup>1</sup> Typical values are nominal performances at room temperature

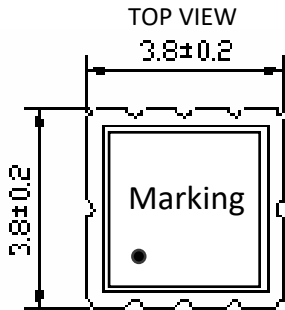
<sup>2</sup> No external matching is required

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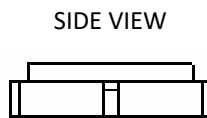
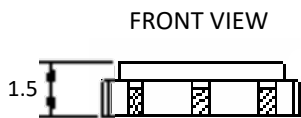
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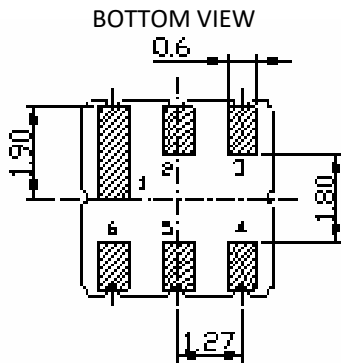
## Model outline, pin connection and marking



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



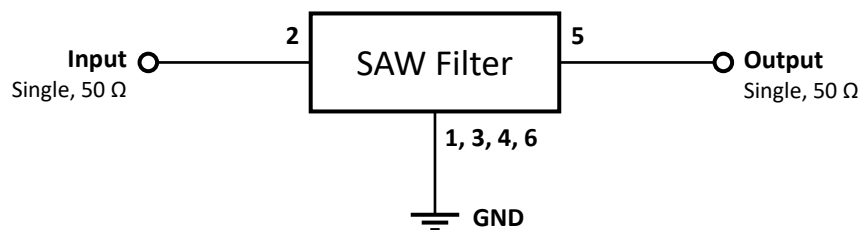
Pin	Connections
2	Input
5	Output
1, 3, 4, 6	Ground



Unit: mm

## Test circuit

50 Ω / 50 Ω Configuration



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## Frequency characteristics

TYPICAL S21 RESPONSE

