

TMX W341

SAW Filter datasheet

5.0 x 5.0 x 1.5 mm, SMD

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TMX W341

SAW Bandpass Filters | Wireless Communications

Features

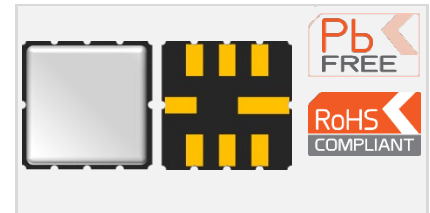
Features

- 869.6 MHz center frequency
- Ceramic package for Surface Mounted Technology
- Low Loss: 3.0dB typical value within PassBand Width 869.2 to 870.18 MHz
- No matching network required for operation at 50Ω

Applications

- Remote Control
- Wireless applications:
 - Smart Building
 - Home automation

5.0 x 5.0 x 1.5 mm



Maximum ratings

Parameter	Min.	Typ.	Max.	Unit
Storage temperature range (T _{stg})	-45		90	°C
Operating temperature range (T _A)	-45		85	°C
DC permissive voltage			0	V
Maximum pulse input power			0	dBm

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

Parameter	Min.	Typ. ¹	Max.	Unit
Center frequency (f _c)		869.6		MHz
Bandwidth (BW, passband width)	0.98			MHz
Pass bandwidth (relative to IL _{min}) at 3 dB		1.85		MHz
Pass band (relative to IL _{min})				
From 869.2 to 870.18 MHz		1.0	3.0	dB
From 869.12 to 870.26 MHz		1.5	6.0	dB
Absolute Attenuation				
From 10.00 to 700.0 MHz	55	60		dB
From 700.0 to 843.0 MHz	40	45		
From 843.0 to 865.2 MHz	28	31		
From 865.2 to 867.0 MHz	15	22		
From 871.7 to 872.5 MHz	10	15		
From 872.5 to 880.0 MHz	11	16		
From 880.0 to 910.0 MHz	15	20		
From 910.0 to 1000.0 MHz	45	50		
Insertion Loss (IL, 869.2 – 870.18 MHz)		3.0	4.7	dB
Source impedance ² (Single ended)		50		Ω
Load impedance ² (Single ended)		50		Ω

¹ Typical values are nominal performances at room temperature

² No external matching is required

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Model Outline, Pin connection and Marking

TOP VIEW

5.0±0.2 SQ

W341
T227AA

FRONT VIEW

1.7 max

BOTTOM VIEW

2.54±0.15

0.64 (x8)

1.17 (x7)

2.08

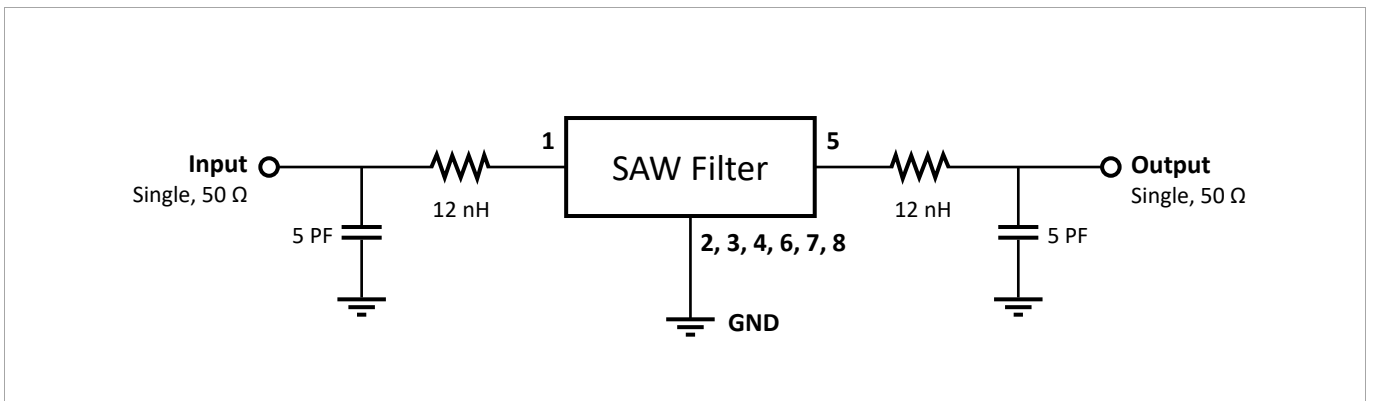
Marking	Note
Line 1	W341 Reference to RakonXpress part number with only the last 4 digits
Line 2	T227AA T = Partner identifier 2 = Last digit of the year 27 = Number of week in the year AA = Lot number in the week (from AA to ZZ)
Line 3	• • = Identify black dot

Pin	Connections
1	Input
5	Output
4, 8	Case Ground
2, 3, 6, 7	Ground

RECOMMENDED PAD LAYOUT (TOP VIEW)

Unit: mm

Test circuit



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Frequency characteristics

